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RECOLLECTIONS
OF A
TOUR IN THE NORTH OF EUROPE.

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MEMOIRS
OF
A TOUR IN THE NORTH OF EUROPE
IN 1836-7.

CHAPTER XIX.

The Empress—Splendour of Dresses—Masked Ball—Grand Dinners—Objectionable Custom—The Theatres—Ice Mountains—The Grand Duchess Helen—Audience of the Emperor—Conversation with him—His Majesty's Opinions—Departure from Petersburg—Count Zubouf.

IN relation to the society and manners of the *beau monde*, the Empress must be supposed to bear the most distinguished part. The amiability of her *accueil* is not more peculiar than her grace and fascination, and she introduces a degree of humour and pleasantry in conversation, which, emanating from royalty, (generally supposed to be wrapped up in formality and stiffness,) does not fail to captivate the stranger that approaches her, while she is truly adored by those

who share in her daily avocations, and are greeted by her benevolent smile.

At Court, dress and the toilette, as already observed, are devotedly cultivated both from taste and policy. Of the innumerable balls that are given during the season at St. Petersburg, the most select are the private balls of the Empress at the Palais Anishkoff. To none of these are the diplomatic corps invited—a prohibition which they regret exceedingly. There are from eighteen to twenty of these delightful *réunions* in the season. At these fêtes no lady, much less an *élégante*, is ever seen twice in the same dress; and so entirely without crease or crumple do their exquisite toilets appear, that, to speak metaphorically, the ladies really seem all to be just turned out of a bandbox. Having been present at several of the balls, I can from my own knowledge declare that I saw always new dresses on every fresh occasion. I had the curiosity to ask a mother how she managed with two and sometimes three daughters who were occasionally invited, and if the expense was not very great during the season. She told me, rather seriously, that each gown cost two hundred roubles, that was six hundred for her daughters every night, and two hundred and fifty for her own, and multiplying that by twenty would show the cost. These sums were for her own and the



Alexandra Feodorovna.

EMPERESS OF RUSSIA.

1. The first part of the report deals with the general situation of the country and the progress of the various branches of industry and commerce. It is found that the country is in a state of general prosperity and that the various branches of industry and commerce are all progressing rapidly.

2. The second part of the report deals with the state of the various branches of industry and commerce. It is found that the various branches of industry and commerce are all progressing rapidly and that the country is in a state of general prosperity.

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Alexandra Feodorovna.

EMPERESS OF RUSSIA.

young ladies' dresses only. I wished further to know if many princes and nobles did not think it inconvenient, but never could get an admission or a complaint in Russia that anything was extravagant, or that there was want or distress in the higher circle, although I have reason to believe, that mortgages are not unfrequent on the estates of the higher orders, in that as in other countries. What is rather singular, these estates are managed by an *intendant*, to whom is delegated absolute and complete direction, and neither wife, son, relation, nor connexion ever influenced a Russian nobleman against the absolute control of his *intendant*.

In addition to the Empress's private balls, she has an inventive genius for every gaiety and diversion. There are continual *petits spectacles* at court. These are performed by the actresses of the theatres, but got up in a splendid manner. Here again the taste for dress predominates, and the actresses are often presented with new dresses from the Imperial purse, every night of their performance. *Bals costumes* and charades, tableaux, and masques successively occupy the attention of the Imperial court in their hours of recreation; and during this year a most costly and splendid *bal masqué*, in imitation of a Chinese court, was got up by the Empress. It far surpassed anything of the kind that had been

before attempted. The great officers of state, the princes, nobles, the most beautiful and distinguished women, are all put in requisition, through an intimation of the Grand Chamberlain, and instead of reluctance, there is an eagerness to be selected, and a chagrin if overlooked, that is quite remarkable : all vie with each other in expensive dresses, jewels, and decorations. The Russians have a wonderful art and taste in making the most of everything they possess ; they improve so largely on original ideas, (suggested from Paris and elsewhere,) that each improvement appears originality ; and I give the palm to Petersburg for carrying the luxuries of fashion and magnificence to a higher pitch than any capital I have ever visited.

At the Palais Anishkoff balls the Emperor sometimes dances or rather walks a cotillon, but generally promenades all night, conversing in the most affable manner with his subjects. The Imperial family occasionally frequent the balls of the foreign ambassadors, and of the most distinguished of their own nobility. This benevolent familiarity gives great and constant *éclat* to the court. The large dinners of the corps diplomatique and of the nobles far surpass those at which I have been present in any other court. The *couvert* is seldom for less than fifty or sixty persons. The palaces in size and decoration are universally sump-

tuous. The attendance of servants is peculiar, two for each guest being the rule, (in livery,) besides the pages and other servants; for the above number of guests, therefore, there are at least one hundred servants. At these great dinners from eight hundred to one thousand lights are but a small illumination. I should be afraid to say how many I have counted at some of the dinners. The dinner is always served round. Wines of all sorts are circulated in the same manner: but on the dessert the greatest expense and attention are bestowed. Petersburg can produce from its hot-houses and artificial means, even during winter, the finest fruit imaginable. The flowers I consider to be inferior to ours. Before the dinner, there is universally a sort of luncheon in an anteroom for the gentlemen, by way of giving a craving to the stomach and sharpening the appetite. At this no ladies appear. It consists generally of caviar, (so renowned in this country for its perfection,) anchovies, dried salt salmon, cheese, and articles of similar description, with liqueurs, cognac, eau de vie, &c. This custom would be more honoured in the breach than in the observance, as the gentlemen return to the room where the ladies are assembled, eating these unsavoury morsels, and talking to the fair sex, as if wholly unconscious of the disagreeable odour that arises from them. I condemn the practice, decidedly.

It affords no society, it cannot be wholesome; the exciting food could be served round (if desired) when all are at table; but this ambulant eating with greasy fingers, and then parading with unwashed mouths amongst the fair sex, do not correspond with the general gallantry of the Russians.

The process before dinner, to which I have alluded, is called the Schälchen. The hours of meals at Petersburg are much earlier than in London, but I am not sure that the arrangements are better; a quarter to four or five is the usual dinner time, from which you are always liberated before eight. No assembly or ball begins before twelve, so that you return home from dinner totally at a loss for occupation until the four hours have elapsed which shall readmit you into society. It is true that the theatres may occupy the intervening time. But as there is no great variety in the representations, you cannot amuse yourself very often with this spectacle. The balls are without number during the season, but there is seldom more than one splendid one every night, which embraces the whole of the best society. All can see and be seen together—an immense advantage over our hot and crowded squeezes in London, on the same night, where half the time is lost in running from one house to the other, to say nothing of your being sometimes half the night in the street.

Amongst the most singularly sumptuous balls I witnessed, I should enumerate those at Baron Fiquelmonets, M. de Baranthe, the Woronzoff, Dashkoff, the Sousakonnet, the Bierolowski, Bielozeski, the Razumowski, and various others. The finest dinners were at Count Nesselrode's, Prince Butera's, Lavall's, Wolkonski, &c., and all the ambassadors. I have mentioned the theatres ; these are all under the immediate charge of the court. They are placed upon a footing of the greatest decorum and propriety. Ladies and gentlemen always go dressed, and all officers in full uniform. In Russia no military man ever wears coloured clothes. A young friend of mine asking a Russian officer if he always wore his uniform, his answer was, " I was born and shall die in it." The great advantage of this exactitude of appearance in the theatre is, that the assemblage has an air of grandeur, display, and order. The French theatre, called *Le Théâtre Michel*, is the most fashionable. The boxes are let for the season, as at the Italian Opera in London. The Alexander theatre is chiefly for Russian representation and ballets. This is of large dimensions ; but a new theatre, opened in 1836, under the immediate direction of the Emperor Nicholas, far surpasses the theatre Alexander in extent and magnificence. I was present at its opening ; and the scene I witnessed

was remarkable. It was lighted with thousands of candles. The whole of the court, (*en grande tenue*,) the assemblage of everything brilliant at the Russian capital, the corps diplomatique, with all their decorations and stars, and the superior officers of the army and guard, with their varied brilliant uniforms, (the spectacle being itself complimentary to the Emperor, who was present,) resembled a scene of enchantment.

The corps de ballet is particularly attended to, and even here nothing escapes Nicholas's attention. In "The Revolt of the Seraglio," a celebrated ballet, where a number of females are drilled and manœuvred on the stage, so anxious was the Emperor that this should be done in the greatest perfection, that his Imperial Majesty and the Grand Duke Michael condescended to attend the rehearsals, and to give instructions on the subject. This anecdote will show that the most trivial matters connected with public exhibitions do not escape the Imperial attention.

The amusements in winter are going *en traineau*, and making parties to the *Montagnes des Glaces*. Of this singular exhibition it may be well to give a short description. The ladies and gentlemen proceed in sledges, or carriages on sledges, to the gardens or places of rendezvous where these montagnes are prepared. The beaux are habited and dressed as

Laplanders, and they are furnished with a very small wooden saddle or seat, barely big enough to squat themselves upon, which they do without ceremony, raising up their knees; they then invite the ladies to turn their backs and place themselves, with their petticoats drawn close around them, between the legs of the gentlemen, sitting just before him on the above-described seat or saddle; the arrangement for the excursion is then complete. The wooden seat with its occupiers is now pulled to the top of a frightful precipice of ice, formed on almost a perpendicular descent of forty or fifty feet. The gentlemen and ladies, all arranged as described, are next precipitated down this frightful abyss, and the velocity with which they are hurled down gives a continued impetus on a narrow road of ice below, to carry the daring adventurers in a rapid course for a very considerable distance.

The chevalier, in these cases, with his hands covered with leather gloves, regulates and steers the seat on which he is seated with his beautiful burthen. On the least change of direction or sudden movement, the lady has no resource but to throw herself back into the arms of her conductor; and while delicacy is certainly shocked by the situation of the parties in this amusement, there is neither grace, beauty, nor any feminine quality exhibited by those who lend them-

selves to the performance, and they run serious risk of broken bones, disfigured faces, or other injury for life, in a display of recklessness of fear and danger unsuited to the delicacy of the female sex.

Another great winter diversion is skating. In this the Russians greatly excel, and a large square railed in on the Neva, in the centre of the English quay, is kept constantly swept from snow and preserved in high order for this object. The ice mountains nevertheless carry all before them, as the ladies universally throng to them. Amongst the most constant visitors was the Grand Duchess Helen, wife of the Grand Duke Michael, and daughter of Prince Paul of Wurtemberg. This princess, to whom I have before alluded, is no doubt endowed with great beauty and extraordinary *esprit*. It is said that she is the best instructed princess in Europe; she is charming in conversation, of steady conservative principles, and really appears to know more of English politics than those who are deeply plunged in its intricacies. She often amusingly ridiculed the bitterness that existed between Liberals and Conservatives, and wondered how they should nevertheless appear as good private friends. The Russians carry feelings of difference on political points so far, that they are all astonishment to see those of different parties, when they meet in their capital, in amicable intercourse. A

curious anecdote occurred on this subject. The British ambassador was walking one day arm-in-arm with an individual notoriously opposed to him in political opinions. The first person they met was the Emperor, who conversed with both, but looked amazed ; shortly after came the Empress and Grand Duchesses,—they appeared equally much surprised ; lastly came the Grand Duke Héritier, who equally stared. At the Imperial dinner the same day the subject was the great topic of conversation. Prince Lieven was asked what he thought the two individuals could be discussing. The prince, having been so long in England, and knowing the habits there, said at once, “ Oh, they were conversing on their mutual county interest,” as was actually the case. “ Oh,” but they said, “ they were *arm-in-arm*,” and this mode of promenading is never adopted by men in Russia, unless they are very intimate, which may possibly arise from nearly everybody being dressed in uniform, and the sword on the left side being an impediment to such a mode of walking.

On the 8th of February I had an audience of the Emperor Nicholas, *pour prendre congé*. He received me in his magnificent suite of apartments at the top of the Palais d’Hiver. You wind round a circular staircase from the grand reception-rooms to arrive at the immediate suite of the Emperor. The

large single glass windows give a commanding view over the Neva, and the great squares of the capital; and nothing is wanting to add to the luxury and comfort of these apartments. The Emperor was dressed in his military greatcoat, and advanced to me with the utmost condescension and kindness; I thanked his Imperial Majesty for the immeasurable favours I had received; I entered fully into expressions of gratitude, because I really felt more than I could express, and I dwelt much at length on the perfection of all the Russian institutions I had visited,—on the apparent wisdom and good regulation that pervaded every part of their government,—on the wonderfully rapid march of the empire towards civilisation,—and on my belief that in no other country in existence did the sovereign reign more completely in the hearts and affections of his people.

“Oui, c’est un bon pays; il faut me rendre cette justice,” was his Imperial Majesty’s short reply.

The Emperor then entered confidentially into his own opinions of England—of her government and her relative position with Russia—which, however, it cannot be expected of me to detail. His Imperial Majesty then spoke generally of foreign affairs, and, turning to his table, pointed out a written document of many sheets of paper, saying, “You see there the last sacred opinions and instructions of my beloved

brother Alexander, founded on the transactions of 1814 and 1815. They are always before my eyes ; to them I religiously adhere, aided, as I hope I am, by the Supreme Disposer of all things ; and nothing shall make me depart from them." The Emperor stated this in a manner that carried with it a deep conviction of the sincerity with which he spoke ; and then breaking off again, he said, " Mais, parlons de votre pays, et de vous-même." His Imperial Majesty then expressed himself in the most attached manner towards England, and said, " that she and Russia were so placed geographically by Providence, that they ought always to understand each other, and be friends ; and I have ever endeavoured to do all in my power to accomplish it. And really," added the Emperor, " I have so much love for England, that when the journals and the radicals were abusing me so outrageously, I had the greatest possible desire to put myself in a steam-boat and proceed direct to London, (apprising, of course, the King of my intended arrival,) to present myself amongst reasonable and fair-judging Englishmen, to converse with them, and to show them how unjustly I was aspersed. It is my ardent wish to cultivate peaceable relations of amity with all powers. I want interior tranquillity, and time to occupy myself with the important arrangements necessary to consolidate the component parts which form this great empire. But have you

seen," he added, "the Abbé de Pradt's book on the Russian, Eastern, and Polish question? You will see developed in that work ideas and sentiments, as if I had written them myself, and you are quite at liberty to tell all my English friends that you heard from my own mouth that such were my own decided opinions." I consider myself justified from these expressions in giving the Emperor's own words on this part of our conversation, and there was a degree of candour in his bearing that could not be mistaken.

The Emperor then took leave of me, after a long and deeply-interesting conversation; and I must own that this farewell scene, considering all the circumstances attending it, and, above all, the monarch who impressed it on my mind, occasioned me emotions of which the remembrance will last for ever.

We left Petersburg on Thursday the 9th of February, and arrived on Monday the 13th at Riga. The road was an entire sheet of frozen snow, and our three carriages were on sledges. The frost being very severe, we proceeded with great velocity, but the pitching and tossing over the rough parts of the road partook of the motion of a ship at sea.

On Tuesday, the 14th, we remained at Riga to recruit from our great fatigue, and to place our carriages again on wheels, as the frost and snow had disappeared, which occasioned a sudden and immense dif-

ference in the climate. Our sledges at Petersburg cost five hundred roubles, and sold at Riga for eighty-five, which may be a hint to future travellers.

General Count Pahlen, the governor of Riga, waited on me and paid us every marked respect. The town is chiefly commercial, and exports much hemp, corn, and timber; the houses are bad and old, and exhibit no striking or remarkable feature.

On Wednesday, the 15th, we were quartered on the road from Riga to Warsaw at Count Zubouff's, where we saw the first specimen of a Russian country establishment, than which nothing could be more hospitable and agreeable. The Countess was a charming person, a sister of Countess Sophie Modena. She did the honours with captivating grace, and everything was in a style of great comfort. On the tables in the drawing-rooms were English novels, pamphlets, and reviews, and I was surprised by accidentally taking up an excellent engraving of one of my own seats in England. The Count is a farmer, and superintends his estate himself. He is a person of great consequence, and much looked up to by the neighbouring Polish nobles. But the part he has always acted has been most honourable to his sworn allegiance to the Emperor.

On Thursday, the 16th, we left Count Zubouff, and on Friday the 17th were lodged for the night at Manenssal.

CHAPTER XX.

Severity of the Weather—Distinguished Attentions—Partition of Poland—The Polish Nation— Reception at Warsaw—Mussulmen Regiments—Picturesque Bivouac—Poland and Russia—Departure from Warsaw—Kulisch—Breslau— Reception in Prussia.

THE route to Warsaw is good even at present, but when the *chaussée* in progress is completed, it will be equal to the Moscow line. The post-horses to Riga were excellent ; on coming into Poland, however, they are much worse. The country is wretchedly poor and flat. We encountered very great difficulties and hardships from the severity of the weather, after we resumed the wheels of our English carriages at Riga. More violent storms of snow, and more intense frost, than I could ever have imagined, assailed us ; the snow drifted, and soon became fourteen or sixteen feet deep ; we were blocked up, and our feld-jäger was obliged to proceed to the neighbouring villages on the route, and procure peasants to dig the carriages out, and finally

to hire the little charrettes upon sledges from the hamlets around, on which alone it was possible to proceed on our journey. Imagine straw laid on these vehicles, and then our baggage ; on the top of this were placed our furs, and on them we took our seats, with no other defence, to travel in twenty-seven or twenty-eight degrees of frost, with keen winds and snow beating on us, for at least two hundred and fifty miles of our journey. The servants and others with us suffered much more, not being so well provided for. I believe no females ever went through more severe fatigue and endurance than those of my family. I could only compare the weather to that of Sir John Moore's retreat from Corunna, and it was in fact much more severe. I should record that, on arrival at every fixed station, I found that the Emperor had graciously sent orders for all the authorities civil and military to receive us with the utmost distinction ; and quarters were provided for us everywhere, either at public offices or private houses. To my great distress, arriving often at a station at four or five in the morning in the bleakest weather, I was forced to witness, on turning out of my wagon, officers *en grande tenue*, civilians in silk stockings, and troops presenting arms. And what made it more embarrassing, I never was permitted to defray any of the expenses of these receptions, nor was I (like an ambassador) in a situation to make presents of diamond

boxes or rings : I believe no one not clothed with an official station, and not a crowned head, ever experienced so honourable and so distinguished a reception.

It is not necessary that I should enter into the history of Poland. Everybody is aware that, under a succession of bad interior governments and disastrous wars, the courts of St. Petersburg, Vienna, and Berlin, concerted and carried into effect a treaty of partition in 1772, by which a portion of inhabitants were left to the Diet, which was forced to acquiesce in the decree. Another and still further partition, between Prussia and Russia, took place in 1793, and the Diet was obliged to submit, which reduced this kingdom to about three or four millions of souls ; but a third and last partition took place in 1795 between Russia, Austria, and Prussia ; and after the peace of Tilsit in 1807, further cessions were made to Russia, but Poland was established under the King of Saxony as an independent sovereignty, with her own constitution, and, by different exchanges and settlements, was consolidated into a monarchy of four millions of subjects. This arrangement lasted till 1815, and at the treaty of Vienna the Emperor Alexander took the title of King of Poland, and united it to the Russian empire ; but it was provided that Poland should have its constitution, and should be governed by its own laws. It is not my intention to enter into the causes

or history of the insurrection of 1831, which entirely changed the political destinies of a country, the first partition of which rendered it more or less an object of great political interest during the successive tempests and revolutions which led to its annihilation. Placed geographically in a position in Europe to give continual umbrage to her powerful neighbours, Poland has fallen undoubtedly a prey to might, and not to right; and though all must deplore her fate as a great nation, the question of the present happiness of the people, as to submitting to inevitable Russian dominion, or attempting further useless insurrection, does not admit, in my mind, of any doubt.

The Polish nation generally are more advanced in the civilisation and manners of the rest of Europe than the Russians; their proximity to southern nations, and their long connexion with France, have given them French usages, and they are more animated and engaging than their northern neighbours. The women are proverbially handsome, though of late, I am of opinion, they have somewhat degenerated; their vivacity is bewitching; and, under all the revolutions of unhappy Poland, I formed an opinion, after my residence in Warsaw, that it may yet be one of the most agreeable cities in the world. The men are eminently brave and insensible to danger: they have not the placidity nor solidity of the Russians; but the Po-

lish nation appears to me to be a compound of the volatile, eager Frenchman, and the cold, steady Russian, partaking of the attributes of each: they excel, as well as the Russians, in an extraordinary facility in learning languages.

With these general ideas of Poland, I will now proceed to give an account of our arrival at Warsaw.

On approaching Warsaw, we were met by orderly officers and a squadron of hussars, who were sent by the governor marshal, Prince Paskewitch, to escort us to the Palais Bruhl, which the Emperor had ordered to be prepared for our reception. We found ready a complete establishment of servants, a large saloon brilliantly illuminated, a great dinner prepared, although we arrived at four in the morning, and various officers on service awaiting our approach. Tired and exhausted as we were after eighteen hours in our carriages, to meet all this honour and attention as it should have been responded to was difficult and harassing; however, during the whole time we remained at Warsaw, we were treated with the same ceremony and respect. We lived entirely at the Emperor's expense, both as to a sumptuous table and as to equipages and servants; and no consideration would induce the attendants to take the smallest remuneration for all that we had received at their hands.

Amongst various old friends, I had the satisfaction

of meeting here again M. de Kosciolofski, well known in England, and by every one who has had the happiness of his acquaintance, for his singular *esprit*, acute understanding, and general information. With Alexander he was not in favour; Nicholas has restored him to the public service, and he is now placed in a most honourable situation at Warsaw, as confidential secretary to the Prince Feld Maréchal. I also renewed an old friendship with General Augerofski, late aide-de-camp général of the Emperor Alexander, to whose memory he was so deeply attached, that he has retired in a great measure from St. Petersburg and the court to reside at Warsaw.

We had, during our *séjour*, a succession of balls, grand dinners, concerts, and theatrical representations; and such was the amiability of the Polish ladies, that they sheltered their consciences under the wing of the new archbishop, and actually danced during Lent. In addition to Prince Paskewitch, the minister of finance and the civil governor gave us splendid fêtes. I must, however, particularly describe *two*, given by the maréchal, which surpassed in interest and beauty everything that can be imagined. One may be designated "*la fête de la cour*," the other "*la fête au bivouac*."

To begin with the latter. The prince assembled in the morning in the environs of Warsaw about twelve

thousand men. The day was most propitious. A part of this force was the chasseurs of Odessa, some squadrons of gens-d'armes, Cossacks, and two squadrons of the Mussulmen regiment. This corps was organised and entirely formed by the Prince Paskewitch himself in the late war with the Turks. The Russian general-in-chief having made himself most popular among many of the Eastern tribes, several of their chiefs ranged themselves under his banner. This brought over many of their soldiers and followers; and finally a regiment was formed as a sort of body-guard from these recruits, called "*Les gardes de Paskewitch.*" They were then found so intelligent and useful, that their establishments were increased, and Mussulmen regiments were created, chiefs of that religion heading their own people. They are mounted on their own horses, armed with spears, javelins, rifles, and sabres. They are as adroit standing on their saddles as in their seats; their expertness as marksmen is very wonderful, and the mixture of Turkish costume with Russian, and a modern discipline, makes them a most curious and interesting force. There is no doubt they would be very formidable in surrounding in a swarm the flanks and rear of regular cavalry. The Prince Maréchal divided the troops into an attacking and defending corps, and placed under the orders of General Nejolow eight battalions of the regiments Netherinbourg

and Jahouts, and the chasseurs and a battery of light artillery, to occupy the road towards Laski, in advance of the town, and to observe a very strong force supposed to be marching on Warsaw. The second corps, under General Ischerewine, with a battalion of the chasseurs of Odessa, and all the rest of the cavalry, light artillery, and particularly the Mussulmen, having arrived, as was supposed, near Laski, advanced from the Moscow road in the plain, drew on the former body cautiously, and then attacked it with superior cavalry. It was positively war itself, so admirable were all the dispositions, the judicious occupation of the ground, the attacks of the cavalry against the solid squares of the infantry, the fierce onset and howling cries of the Mussulmen, and, finally, the steady order of the retreat of the columns of infantry. And here I must express my wonder at the perfection of this Mussulmen regiment. Their admirable dexterity in horsemanship, with the sword and in firing, their picturesque and formidable appearance, combining all the colours of the rainbow in their Eastern costume, with their beautiful horses, covered with rich housings and trappings, will make them of incalculable service to the Russians in future wars; and the precision with which they will be enabled to take off general and staff officers on reconnoissances,

appears to render it advisable for the Emperor to increase this force, as far as he may be able.

The battle being finished, at sunset we proceeded to an adjoining wood, in the centre of which stands a convent with an open *emplacement*. Around this space bivouac fires lighted up the atmosphere. A tremendous snow-storm at the end of the day only served to render the scene more thoroughly campaigning. The troops had their brandy and bread served out. Then began the music, and Mussulmen and Cossacks came into the open ground, formed in dances, and joined in a chorus of strange and singular harmony around the blazing piles of wood. The mixture of the regular troops with the Asiatics, the mazes of the grotesque dance, the wildness of the voices, the spirited Barb and Tartar horses, neighing at their piquets, all in front and surrounding a large guinguette, fitted up and illuminated for the dinner of the officers and company, exhibited a picture quite unparalleled. Three or four hundred sat down to a sumptuous hot repast. I need not say that in our libations the Emperor and magnificent army of Russia were not forgotten. On horseback nearly the whole of the day, and wet to the skin from the snow, *les militaires* were but dirty companions for the beauties of Warsaw, who had come dressed according to the Empress's *code*

de toilette ; however, they were all very amiable. La Princesse Paskewitch, a most amiable person, was exceedingly agreeable ; and there never was a happier nor a more enjoyable evening.

Next for our *fête à la cour* at Lajinska. We assembled, at half past three, two hundred persons, and dined in the most princely style ; the ladies vied with each other in richness of dress, jewels, and tournure. I could not have conceived it possible that this city, considering its revolutions, should appear so finished a metropolis. The alleys were illuminated ; the reflection of hundreds of lamps in the water gave a fairy enchantment to the *coup d'œil* which the palace exhibited, and the fine proportions and ornamental decorations of the ball-room added greatly to the brilliancy of the spectacle. We have read of such scenes in the Arabian Nights, but on this spot alone have I witnessed the reality. We separated at midnight.

With regard to the country, its politics, inhabitants, and present state, I shall only say a few words. The appearance of the lower class, the cottages, and the great poverty, reminded me a little of Ireland. The number of Jews creates an unfavourable impression. The immense plains are uninteresting, but the land has great resources ; time and conciliation will bring about the amalgamation with Russia, which is surely now so ardently to be desired. The consecration of

Catholic bishops, and the arrangements which secure the preservation of the Polish language, which the Emperor has recently perfected, are wise and just provisions. I stated to all the Poles with whom I conversed, that their *soi-disant* friends at Paris, and *les liberaux* in England, are the worst enemies they have, as their acts keep Russia on the *qui vive*, and prevent the enlargement of the Emperor's gracious intentions and benevolent wishes. I met several enlightened men who agreed with me, but there are others who are not to be convinced; I cannot therefore say that any cordial feeling with Russia is yet *established*, although it is undoubtedly making progress.

The Marshal Prince Paskewitch appears to me as able in the art of civil administration as in that of war: his task is an arduous one. I know no subject in Europe that stands in a more difficult and responsible position. But he is a great man, and I have much faith in his success. The new buildings and new town are fine; the shops and commerce flourishing; the prisons, manufactories, &c., all of which I visited, well regulated. The citadel, lately made by the Emperor Nicholas, bears witness to the colossal energy of the power which has erected this stupendous work in two years. Upon the whole, I am persuaded, that by firmness, conciliation, and by just and temperate measures, this country will become

as flourishing and happy as it was before the revolutions, and free from all the jealousies and intrigues of bad national administration. I was beyond measure gratified at seeing Poland, of which we really speak so ignorantly in England. My eyes were fully opened, and I hope, in time, others will see also with unprejudiced vision. Many may regret (amongst which number I confess I have always been one) that the conditions of the treaty of Vienna as to Poland were not carried into effect by Russia. But when that power saw other nations departing from the principles then established—when rebellion and treason were abroad, and undermining the Imperial sway—would any sovereign be unmindful of the opportunity of seizing those means, within reach, of consolidating his dominions and securing his own empire for ever? It cannot be denied that Russia conquered Poland by force of arms. It is equally certain that France, with all her mighty military means under Napoleon, could not conquer Russia. It is morally impossible that Poland can ever again be severed from Russia, and established as an independent kingdom, unless with the previous subjugation of Russia. What power, after the signal failure of France, can accomplish this, so long at least as Prussia and Austria support the present order of things?

Let the politicians of Europe weigh well these few

observations, and ask themselves if promoting sedition, discontent, and democracy in Poland, can by any probability tend to the happiness and welfare of that nation.

Our agreeable *séjour* at Warsaw drew now to a close, and the prospect of an early meeting of Parliament being before me, we thought it expedient to bend our course homewards.

Having taken an affectionate leave of the Marshal Prince Paskewitch and his amiable wife, who, so flattering were their attentions, came to see us into our carriages, and having said farewell to all our kind friends at Warsaw, amongst whom I must specially designate Prince Augerowski and Prince Kosciolowski, we departed on the 26th of April on our route to Berlin.

We halted the first night at Kudno, at the commissariat house of the district. Everything had been put in requisition for our reception. The same etiquette in respect of the officers receiving us in uniform—the same ceremony of guards of honour and orderlies, and the same desire to place everything before us cost free, by the supreme direction of the Emperor, were here manifested as on former occasions.

We reached Kalisch on the 28th of April, during intense cold, and under a heavy fall of snow. This place is well known to the military and diplomatic

world. It is the frontier town between the kingdom of Poland and the Prussian States, and is surrounded by vast and seemingly interminable plains. From a mere village, the Emperor has lately erected it into a considerable town. Large palaces have been built with unaccountable rapidity, to afford quarters to the great princes of Europe, who have assembled there, at the Emperor's invitation, to review large bodies of troops. It appears, indeed, as if his Imperial Majesty contemplated this place as one well adapted for the assemblage, whenever such may seem expedient, of an immense force, either for effect, demonstration, or exercise.

The Imperial quarters were large and commodious. An excellent supper was prepared for us with the usual attendance and hospitality.

On the 2nd of March we entered the Prussian States. There is no *chaussée* on this side till you arrive at Breslau, and the road was abominable at this season, with four or five feet of snow. Breslau is a considerable old fortress. The town is composed of narrow streets and high buildings, surmounted by curious turrets. A fine bronze statue has lately been erected here to the hero Blucher by the brave Silesian army. The commerce of the town is very great; the garrison is formidable, and the fortifications are in excellent order.

Not having much leisure to delay at Breslau, we pushed on to Frankfort on the Oder, an excellent and agreeable town, with a fine cathedral, in which is a beautifully painted glass window, well worthy the inspection of travellers. We arrived finally at Berlin on the night of the 5th of March.

It would take up more time than I can at present spare, were I to enter now into any account of my delightful *séjour* of nearly a month at Berlin. I shall reserve this for some future publication ; for it would be impossible to comprise, within a few pages at the end of this Memoir, a description of all the interesting and magnificent objects I witnessed, and of the dignified hospitality of the king and his accomplished and fascinating family. It must at present suffice to say, that the Duke of Cumberland had ordered excellent apartments for us at the Hôtel de Russie on the Linden. We were indeed almost domiciliated with his Royal Highness and the Duchess during our stay in the Prussian capital : their kindness was deeply appreciated, and can never be forgotten by us.

We had constant dinners, receptions, and fêtes at court. The King was unceasing in his kindness to me ; and all the royal family, following his Majesty's example, treated us with the like favour and condescension. We were honoured, moreover, by special grand entertainments made for us by the Russian,

French, and English ministers. Lord William Russell indeed, who, in spite of our political opinions being wide as the poles asunder, and notwithstanding those instances of Lord John Russell's conduct towards me, which no time can efface or circumstances remove from my memory, studiously went out of his way to be attentive to us.

To crown all, on leaving Berlin, the King sent Lady Londonderry and me very magnificent presents in fine vases and china from the splendid Berlin manufactory; and I now hold these, together with the other matchless presents which I have received from the sovereigns of Europe, as proud and flattering testimonials that, far more by the acts of another than by my own humble efforts, the name I bear will be remembered on the scene of Europe.

SECOND PART.

VOL. II.

D

AN HISTORICAL AND STATISTICAL SKETCH

OF THE

CITY OF ST. PETERSBURGH,

SINCE ITS FOUNDATION.

PETER the Great, desirous of transporting the seat of his empire to the borders of the sea, and of approximating his capital to the western part of Europe, whence he might draw the elements of civilisation so indispensable for the improvement of his subjects, chose for that purpose the banks of the Neva, a territory conquered by him from the Swedes.

The local difficulties would have deterred any other but this monarch from such a purpose. As the whole of the ground had been, like that of the Delta in Egypt, formed by the slow but continual depositions of a river, the soil was consequently so humid and light, before the waters had been well drained off by

canals, that the labour must have been immense. These islets were also frequently subjected to inundations, caused chiefly by the west winds, which blowing violently, not only obstructed the waters of the Neva in their downward course, but oftentimes forced the waves of the sea to flow up with those of the river itself. Nor was the climate such as was likely to attract inhabitants, owing to the severity of its temperature, the dampness of its soil, and the great atmospherical changes consequent upon its vicinity to the sea.

But Peter the Great had seen in Holland flourishing towns, which had sprung up upon ground previously drained by canals; towns, in many instances built even below the level of the sea, but protected from its inroads by powerful dikes. As to the unfavourable climate, he anticipated, and with justice, that the clearing and draining of the ground would materially improve it: it may also be naturally enough conjectured, that the pleasure he felt in imitating a country in which he had during his youth acquired so much practical knowledge, acted as no slight stimulus for the completion of his plans.

It was on the 16th of May, 1703, that the Czar commenced the construction of a fortress at the mouth of the Neva, on an island then known by the

name of *Yeni Saar*, or *Hare Island*. Another establishment, consisting at the time of only a few wooden huts, was simultaneously formed in the adjacent island of *Kowe Saar*, or *Birch-tree Island*. Such is the humble origin of St. Petersburg, which now reckons half a million of inhabitants.

The most ancient part, although now no more than a suburb, was Kowe Saar, at present called the Quarter of St. Petersburg. Shortly after this, another colony established itself on the left bank of the Neva. It was not, however, until after the victory of Pultowa, which, in the words of Peter the Great, "firmly laid the foundation-stone of St. Petersburg," that he caused works worthy of himself to be commenced. Assembling a vast number of workmen, he erected his citadel in the short space of four months. A great mortality was a necessary consequence of the deficiency of supplies, and the severity of the climate, all which casualties were repaired by fresh levies. Stone fortifications replaced mud ramparts. Streets at right angles were laid out in the Kowe Saar, the Admiralty, the Dock-yard, a small Summer Palace with its extensive gardens, the Winter Palace, now the barracks of the Preobiazensky Guards, were all built upon the left bank of the Neva, and prove that this isle, formed by the Moika and the Fontanka, were exclusively confined to

government buildings. A foundry constructed on the other side of the Fantanka, together with the huts of the workmen, originated the beautiful quarter now called *Liteinaia*. Here were also lodged the different regiments of guards.

But it was upon the island called by the Czar *Vassili Ostroff*, situated on the right of the Grand Neva, a little below the citadel, that he intended to lavish his greatest embellishments. His design was to make it a new Amsterdam, defended from all hostile attacks by impregnable bastions and redoubts. The plans he projected for the accomplishment of this were immense; not less than 259 wersts of canals were to be dug, and an enclosure of 17 wersts in circumference to be fortified.

It was here that the clergy, nobility, and merchants were to reside, the mechanics and lower classes having their abode assigned them either in the St. Petersburg or the Wibourg quarter, which portion of the city was already in progress of formation on the northern bank of the river.

In 1710, the public functionaries and nobles belonging to the court, and the ministers of the supreme courts of justice, were ordered to take up their residence at St. Petersburg, whither also the Czar had invited many artists and mechanics, foreigners as well as natives.

In 1717 the number of houses in Vassili Ostroff was about 500 ; in the other quarters, St. Petersburg being the principal, 1,679 ; in that of Moscow, on the left bank of the Neva, 529 ; in Wibourg, 345. Total, 2,553. The majority of these were, however, miserable little wooden buildings.

Twenty-three years after the foundation of St. Petersburg, Peter the Great died ; and, with the exception of the church erected over his tomb, there now remain scarcely any of the buildings raised during his lifetime, but such as have undergone alteration. After the monarch's death, although St. Petersburg still continued to be the seat of government, Moscow was considered the metropolis ; so much so, that, in the reign of the Empress Anne, many persons who had established themselves in the new capital abandoned it for the interior of the country.

St. Petersburg made great advances under the Empress Elizabeth. This princess, who was fond of pomp and magnificence, invited to her court the ablest foreign artists, and commenced embellishing the city with edifices of vast extent and extraordinary beauty. The great Winter Palace, considered in the present day a *chef-d'œuvre*, was built under the direction of the celebrated Rastrelli, as were also the Palaces of Anitchkoff, Strogonoff, Woronzoff, and several others.

With Rastrelli also originated the plan of the Monastery of Smolino, together with its vast church, begun in 1736, and completed one hundred years afterwards, in the reign of his present Majesty the Emperor Nicholas I. Much native talent now appeared : amongst other artists, Baschmakoff was particularly distinguished.

But notwithstanding all the efforts of government, St. Petersburg was still far inferior to Moscow ; whilst the ancient residence of the Czars reckoned above 300,000 inhabitants, the population of the new capital upon the banks of the Neva only amounted, in the year 1750, to 80,000 souls, and at the accession of Catherine II. this number had only increased 30,000.

It was reserved for this last princess to have the glory of furthering the magnificent plans of Peter the Great, by giving a new stimulus to Russia, and by infusing fresh activity in her subjects for completing the embellishments of her rising capital. From the commencement of her reign, she abandoned all direct methods formerly adopted, to oblige the inhabitants of the provinces to establish themselves at St. Petersburg, being well assured that the attractions of an elegant and polite court,—the resources which would soon be offered of rich collections of the productions of nature and of art,—superb galleries of pictures and statuary,—magnificent spectacles,—and, above all, the

wise and enlightened protection which she granted to commerce and to every branch of trade,—would suffice to draw to the capital a numerous population. The event soon justified her anticipations, and from that time an astonishing progress was made without any interruption.

At the period of her mounting the throne, St. Petersburg, already rich in vast churches and superb edifices, was still far removed from that uniform and regular beauty now so much admired in it. Vassili Ostroff, and the quarters situated beyond the Fontanka, were henceforth to form the city, properly so called; those which extended along the left bank of the Fontanka were divided into three suburbs—those of Livonia, Moscow, and Alexander Newsky. Commissioners also were empowered to compel proprietors to build their houses of several stories high, for the better concentration of the inhabitants; their attention was also particularly directed to the embellishment of the banks of the Neva.

Several circumstances now concurred in favouring the views of the commissioners: the nobles flocked in great numbers to St Petersburg, which became more and more improved and embellished in proportion as its increasing commerce rendered it more opulent, while the population multiplied exceedingly. This city, which, towards the close of the reign of Elizabeth,

could only reckon 110,000 inhabitants, had, in 1765, 150,335. In 1770, the numbers were 158,782; in 1775, after the disasters caused by the inundation of 1773, 158,365; in 1780, 174,778; in 1784, 192,446; in 1789, 217,948. Often, in the course of a single summer, whole streets of small wooden tenements disappeared to make room for vast stone edifices, which found occupiers the moment they were finished. New palaces and new churches were erected in every part of the city, amongst the most prominent of which may be reckoned the church of the Monastery of St. Alexander Newsky,—the Palace of the Taurida, with its beautiful gardens,—the vast edifice of the Academy of Fine Arts,—that of the Academy of the Sciences,—the Bank,—and the Hospital of Aboukhoff.

Travellers by whom this city was at that time visited, assure us that vast and gloomy woods, loaded with vapour and humidity, adjoined the most elegant and populous quarters; little wooden huts stood beside magnificent palaces; while a great extent of ground, covered with ashes and ruins, presented the traces of a great conflagration which had broken out on the 26th of March, 1764.

The official reports of the year 1778 prove that this picture is not exaggerated. By these we also learn, that even sixteen years after Catherine's accession, only one quarter of the city could be considered as

completed—that of the Admiralty, in which were to be reckoned two hundred and sixteen large and handsome stone buildings, and not one of wood. The total number of stone houses in the city did not, however, exceed six hundred and thirty-three, the remainder, 3,800, mentioned in the reports, were all of wood: the number of the inhabitants was at this period 165,000.

It being the wish of the Empress, from the commencement of her reign, to remedy the want of regularity which gave her capital the character of a yet unformed city, she appointed a commission, having for their president General Tchernischeff, whose chief duties were to draw up a plan by which a greater regularity in the formation of the streets, edifices, &c., might be insured, and to restrict the further increase of the city, which was already disproportionately great for the number of its inhabitants. It would have been easy, owing to the level nature of the ground and the materials of the old buildings, to introduce the boldest changes; but the vast expense which would necessarily be incurred, proved an insurmountable obstacle. The great object was, therefore, to preserve, as much as possible, the former arrangement of the streets, squares, &c., imparting to them as much regularity as circumstances would permit.

A fire having, in 1786, destroyed a great portion of the Gostinoi Door, which was constructed of wood, it

was replaced by magnificent stone arcades; and the Empress erected the famous statue of her illustrious predecessor, which is the admiration of every beholder.

The great increase of population soon rendered necessary a new division of the city into nine quarters, the numbers being, at the close of the eighteenth century, not less than 220,208 souls.

The increase of St. Petersburg was not very apparent under the reign of the Emperor Paul I. It was, however, in his time that the central part of the city, between the Grand Neva and the Fontanka, which had hitherto formed only three quarters, was divided into four, designated by the names of the first, second, third, and fourth quarters of the Admiralty.

Upon the accession of his son, Alexander I., the utmost exertions were made for the improvement and embellishment of the capital of the empire. The Emperor's attention was more particularly directed to the effectual draining of the ground. Numerous canals had been dug for the purpose by his predecessors, such as the one which forms a communication between the Moika and the Grand Neva, and those of Krukoff and Ligova. Under the Empress Anne more especially, great exertions had been made to drain off a morass which covered a vast quantity of ground now occupied by the Liteinaia, the Karetnaia, and the Moscow

quarters; and under the reign of Catherine II. similar efforts powerfully contributed to change the general aspect of the city. At this period were constructed, on the left bank of the river, those magnificent quays, which, begun in 1764, required the uninterrupted labours of thirteen years to complete. The construction of the Canal of Catherine, and of the two grand roads leading from the capital to Czarskoeselo and to Peterhoff, is also to be attributed to that illustrious woman.

Much, however, remained to be done at the commencement of the nineteenth century. With the exception of Vassili Ostroff, the quarter of St. Petersburg, and a part of the Island of Apothecaries, all the islets situated on the left of the Neva were still in their original state, covered with damp thick fogs, which afterwards spread over the city itself. By the order of Alexander, these islands were transformed into delicious gardens; an artificial elevation was also given to the islands of Kammenoi, Ostroff, and Yolaquire; numerous canals were excavated, and every means adopted that could produce a beneficial change in the atmosphere and climate. Various magnificent buildings, too numerous to mention here, now sprang up, as if by enchantment, in different quarters of the city. Trottoirs added not only to its embellishment, but also to its comfort; and in 1810 a new quarter,

that of Narva, was added, which now increased the number to twelve, reckoning that of St. Petersburg, hitherto considered as a suburb. The following statement will show the amazing progress made in a few years in the population and buildings. The number of inhabitants, which at the close of the preceding century amounted to 220,208, increased in 1805 to 271,137; in 1812, to 308,474; in 1814, to 335,743; in 1817, 344,619; in 1819, to 363,938; in 1825, to 424,741. In 1778 the city did not contain 4,000 houses, of which 600 only were of stone. In 1814 the first quarter of the Admiralty contained 282 stone houses, and 29,800 inhabitants. In the three other quarters of the Admiralty were 783 stone and 344 wood houses. The total of houses in the capital was 7,123, of which 2,181 were of stone.

In 1833 the extent of ground occupied by St. Petersburg was 81 wersts 35,147 square sagnas, Russian measure, equal nearly to 21,905 English acres. The number of houses in 1833 in the

	Stone.	Wood.
First quarter of the Admiralty -	265	—
Second - - - - -	245	26
Third - - - - -	313	25
Fourth - - - - -	243	238
In the Liteinaia quarter - - -	398	464
Moscow - - - - -	339	507

	Stone.	Wood.
Narva - - - - -	114	360
Rojentskvenskaia - - -	109	506
Karetnaia - - - - -	243	289
Vassili Ostroff - - - -	297	682
St. Petersburg - - - -	85	1154
Wibourg - - - - -	55	309
Okhta - - - - -	24	686
Total of stone - - -	2,730	
----- wood - - -	5,246	
Grand total - - - -	<u>7,976</u>	

The population amounted, in 1833, to 442,896 inhabitants, of whom 301,870 were males, and 141,026 were females. In 1822, the property in houses was estimated to exceed the sum of 13,885,899 roubles.

Owing to the great exertions made by government for improving the atmosphere and climate, the mortality has sensibly diminished in the capital. From official reports it appears, that sixty years ago, the proportion of deaths was one in thirty-five; it is now one to forty-two, and the average duration of life, which in 1781-1790 was 32½ years, is now 44½ years.

This report for the year 1835 embraces, as might be expected, a great variety of topics; the following is a short *précis* of the most interesting.

In an extensive and fertile country like that of

Russia, which produces grain sufficient, not only for home consumption, but for exportation, the various branches of husbandry connected with agriculture naturally require no small degree of attention on the part of government. The short crops of the preceding years had imposed upon the home department the duty of assisting those provinces which had suffered in consequence, and of providing every part of the empire with corn, chiefly imported from abroad.

The government was relieved from this care in 1835 by a harvest, which, although not the most plentiful, sufficed, at least, for the wants of the consumers. Five provinces only—those of Witebsk, Livonia, Olouets, Pokoff, and Esthonia,—claimed that assistance, which was immediately afforded. Measures have now been taken to provide against the ill consequences of any future scarcity by the establishment of reserve magazines, and by the creation of a fund to be applied to the purchase of foreign corn; in addition to which, government has authorised the introduction of rural banks (similar to those in operation in the island of Ozel) into the three Baltic provinces.

The wool trade is now cultivated in Siberia, the remotest part of the empire, a wool company having

been established there in 1832. The efforts of this association have been very successful. Means have also been adopted for encouraging horticulture, for which purpose model-gardens have been formed in the governments of Poltava, Penza, Catherinosloff, Kherson, and the Taurida. Her Majesty the Empress' has also been graciously pleased to patronise an association formed at Moscow for the same objects, and to present the society with a portion of her Stoudenetz estate.

Internal commerce is also in the best state. The exchange of agricultural produce, as well as of manufactures at different fairs, has very much increased. The proceeds from goods sold exceed the sum-total of the sales of the preceding year. At Nijny-Novgorod, the difference in favour of 1835 has been 9,272,345 roubles; at Kharskoff 9,225,320 roubles; at Kursk 1,811,923 roubles; at Taganrog 323,345 roubles; at Tamboff 92,970 roubles; and at Irbit 1,137,127 roubles.

Nineteen fairs have been established for the benefit of trade, in several principal towns of the empire, and thirteen in lesser ones; seven new bazaars have also been built in the former, and six in the latter.

The home department has also been seriously engaged in the organisation and internal administration of towns; and the government being particularly

anxious that the balance-sheet of receipts and expenditure should annually be forwarded by the large towns, not less than twenty-six have forwarded their budgets during the present year : and it is satisfactory to remark, that the disbursements have never exceeded what was absolutely necessary.

The hopes indulged as to the new regulations upon free pasture lands belonging to towns have been fully justified by the results. The local authorities now appear completely awake to the advantages accruing from the working of them. Indeed, independently of the townsmen themselves, numerous applications have been made by nobles and foreign merchants for grants of land, with the view of establishing farms or manufactures, subject, of course, to the annual rent fixed by law. A portion of these lands has also been granted to such detachments of the army as are stationary,—kitchen gardens, of eight dessetines in extent, being assigned to all the garrison battalions, two to each company of invalids, and one to each commissariat detachment.

A great increase is observable in the population of the steppes, which are annexed to the government of Saratoff, on the other side of the Volga. These steppes, which, when the seventh census was taken, had a population of 88,650 men, (the women not being taken into account,) have now become so popu-

lous, that the number of males is almost three-fold.

In Bessarabia two districts have been formed. A new German colony is established in this province, and the population has increased tenfold since the last census.

His Majesty the Emperor having granted a free pardon, and permission to return, to all Russian subjects who had emigrated into Turkey at any former period, 1,722 individuals have availed themselves of this act of grace, the greater part of whom have settled near Touthkoff. For the further encouragement of these colonies, they have been exempted from some of the taxes for the space of five years.

Vaccination has made the most satisfactory progress in the provinces. According to the reports of local authorities, 495,371 children have been vaccinated in the interval between the last six months of 1834 and the first six of 1835. The proportion between those who have been cured is one to twelve. The improvements made every year in the public establishments near the different mineral springs in the interior of the country attract considerable numbers.

A medico-electric establishment has been formed at St. Petersburg, and another of artificial mineral waters has been opened at Wilna. The various me-

dical institutions are most flourishing. Not less than 2,178 students have attended the courses of lectures of the Medico-Chirurgical Academy of St. Petersburg, and the subsidiary Academies of Moscow and Wilna. Out of this number 1,247 have entered at their own expense, the rest at that of the government or of private foundations.

Amongst other most useful establishments connected with this department, is the manufactory of surgical instruments at St. Petersburg, which in 1835 furnished the army and the other branches of the public service with instruments, the cost of which amounted to 184,000 roubles. The value of them finished off in the course of the present year is 99,000 roubles.

The organisation of the hospitals throughout the empire, upon a plan approved of by his Majesty, at present engages the attention of the home department. Amongst other provisions it is proposed to form, in each government, large establishments under the name of District Hospitals, intended for the reception of persons suffering under such chronic disorders as require a careful and prolonged treatment. Hospitals upon a smaller scale have also been opened in six different provincial towns. A lazaretto has been built at Nijny Novgorod, exclusively appropriated to the boatmen frequenting the fair held at that town.

Orders have likewise been given to distribute medicines gratis to such of the sick poor as cannot be received into these establishments.

Another improvement is the formation of schools for the superintendents of hospitals: these will, in time, furnish persons every way fitted for undertaking the direction of civil hospitals. Two of these schools are in activity at St. Petersburg and Moscow; a third will soon be opened at Casan, and a fourth at Wilna. At Moscow a lunatic asylum has been established, into which patients are admitted and receive medical treatment previously to their being sent to the hospital. A separate building has also been constructed for convalescents of this class. The organisation of the Orphan and Foundling Hospitals at Kalonga has been completed upon the plan of that of St. Petersburg, opened in 1831.

Private benevolence has considerably enriched the charitable institutions both of St. Petersburg and Moscow; not less than 330,000 roubles having been dedicated to this praiseworthy object, besides other grants of lands, houses, &c. The general state of the finances of the board for charitable institutions is most satisfactory. Notwithstanding that 2,566,605 roubles have been set apart to defray the expenses of buildings intended to be erected within

the next five years, the account of the fund was as follows:—

*State of the Finances of these Establishments on the
1st of January, 1836.*

		Roubles.		Copecs.
Capital	- - - -	42,456,437	-	15
Deposits	- - -	80,395,950	-	5 $\frac{3}{4}$
Total	- -	122,854,387	-	20 $\frac{3}{4}$
Being an excess over the pre- ceding year of	} -	10,528,984	-	95 $\frac{1}{4}$

The maintaining and perfecting the means of communication throughout the empire is one of the most important duties attached to the home department. The works of this description have everywhere been vigorously prosecuted. The new high road between Dunabourg and Kowno has just been completed, and several others have been already commenced.

Many important public works have been undertaken in many of the towns. Of this number is the construction of quays along the Oka, and from the Volga to Nijny Novgorod. At Moscow preparations are making for building the church of the Saviour. Eighteen other towns have obtained permission to execute works, the plans of which have received the ap-

probation of government, and to employ upon the said works 442,437 roubles raised upon the municipal funds : 30,829 roubles have also been appropriated to the establishment of a regular steam-boat communication between the ports of the Black Sea and those of the Sea of Azof.

AN
HISTORICAL SKETCH OF
O D E S S A, I T S T R A D E, &c.

WHEN, in 1774, Russia had acquired, by the treaty of Kaïnardgi, the right of navigating the Black Sea, the government lost no time in forming several maritime establishments upon its shores, the chief of which was Kherson, or Cherson. This town is interesting to an Englishman, from its being the burial-place of the benevolent Howard. His grave is at a short distance from Cherson, on the road to Nicholaieff, and is conspicuous by a small brick pyramid, which was placed over his remains instead of a sun-dial which he had requested, built at the mouth of the Dnieper. But the advantages promised by its site were, for the most part, never obtained, not only in consequence of its port being shallow and blocked up by the ice five months out of the twelve, but also because the

entrance into the Bosphorus was still closed against the Russian flag.

In 1792, the Empress Catherine II., having reunited to her empire some territories of which Poland had in ancient times dispossessed it, directed her attention towards founding upon the shores of the Black Sea a port which might serve as a convenient entrepôt for these newly-recovered provinces. Her choice of a site fell upon the banks of a small creek near the Tartar village of Hadgi Bay ; and it is there that the gay and opulent city of Odessa now presents itself to the admiring traveller. That the selection was a felicitous one, was proved by the returns of even the few first years. In 1795 the total value of exports and imports did not exceed 68,000 roubles ; but in the same proportion as the commercial importance of Cherson, Nicholaieff, and Otchakoff, sensibly declined, that of Odessa increased—its exports amounting in 1796 to 172,000 roubles, and the next year to 208,000 roubles. Nor was it long before this city attracted to itself the whole of the foreign trade. Taganrog, which is situated upon the Sea of Azof, was the only town uninjured by this superiority—its trade being dependent upon other sources. Situated upon the confines of Europe and Asia, and comparatively near the centre of the empire, Odessa so well understood how to take advantage of its commanding position, that the activity

of its commerce daily increased. Almost the only commercial relations of the ports of the Crimea, especially Theodosia, were, on the contrary, confined to Turkey, which exchanged the produce of the peninsula for articles suited to the wants of its Mahometan population.

The Emperor Alexander, upon his accession to the throne, immediately reduced the duties imposed upon all vessels entering the ports of the Black Sea twenty-five per cent.; granting, moreover, to Odessa all the rights of an entrepôt, which privileges it continued to enjoy until it obtained those of a free port. Many circumstances concurred at this time in giving a sudden impulse to the trade and navigation of a sea which but a short time since was almost unknown. The Sublime Porte had just granted the right of passage through the Bosphorus to the English, French, Dutch, and Prussian vessels; and the peace of Amiens promised Europe, then almost exhausted with a protracted war, an interval of repose. In 1803 five hundred and thirty vessels entered the harbour of Odessa, which city could not then boast of more than 8,000 inhabitants; and in the course of the same year not less than 60,000 tchetverts of corn quitted its port, which sold at the rate of five silver roubles per tchetvert.

Even the war which soon broke out again between

France and England exercised, at first, no other than a beneficial influence upon these distant shores. The maritime commerce of France and Spain being annihilated, Trieste engrossed to itself that of the Levant. Wars upon wars deprived every branch of industry, commerce, and even agriculture, of the necessary hands. Many countries, wholly unable to produce corn and other grain sufficient for home consumption, found themselves compelled to obtain it from abroad. In no part of the world was this kind of produce cheaper than in the ports of the Black Sea ; the natural consequence was, that in a short time large capitals which, on account of the calamities of war, could not be safely employed elsewhere, found their way to Odessa.

This great activity, however, to which the south of Russia is indebted for the beginning of its fortune, was soon interrupted by a war between Russia and the Porte.

Some years afterwards, the general peace, conquered at Leipzig and Waterloo, happily restored tranquillity to entire Europe ; and upon this, the trade of Odessa immediately revived with fresh vigour. France, which, since the commencement of the century, had made immense progress in all the productive branches of commerce, particularly required from the countries capable of providing her with them, the elements of her manufactures. From that time her commercial

relations with Russia experienced a considerable increase. On the other hand, the unemployed capitals which had been accumulating for several years at Leghorn and Genoa, at length returned into circulation. The ports of the Levant were the points of attraction, and the Genoese especially came to purchase at Odessa goods of which they afterwards resold a part to France and Spain. A rivalryship manifested itself on the part of the merchants of Leghorn and Trieste, but the latter were indisputably inferior in the magnitude of their speculations. Although, generally speaking, the commercial intercourse of the Mediterranean ports was almost exclusively confined to those of Southern Russia, yet numbers of English visited the shores of the Black Sea chiefly as agents of Italian or French merchants, while the Turkish flag, hoisted on Greek vessels, frequently appeared in the roadstead of Odessa.

Even the calamities which afflicted Europe in 1816 and 1817 contributed to infuse fresh energy into the commerce of these shores. The crops having almost generally failed, orders for the purchase of grain of every description became so numerous and so considerable, that Russia, notwithstanding its fertility, could scarcely execute them. The activity which then prevailed in the port of Odessa, the quantity of specie which flowed in from all parts, the prices obtained for produce, and the increased value of labour in the

neighbouring countries, were circumstances which might well induce an error touching the real and permanent importance of this traffic. A false estimate was indeed formed of it, and this mistake had the most disastrous consequences. The harvest of 1818 had already relieved Europe from the fears of a dearth, whilst the warehouses of Odessa were still filled with grain bought at very high prices. The merchants continued for some time exporting upon their own account, but such speculations were of course unsuccessful, and the trade of Odessa experienced considerable losses. The tchetvert of wheat, which but lately was worth forty-five roubles, was soon reduced to twenty, and the following year offered for thirteen. From that time the only corn exported was for the account of the Genoese and the Greeks, who were satisfied with a moderate profit, considering themselves fortunate in having an opportunity of employing their vessels, which would otherwise have remained idle in their ports, so much had their numbers increased during those years in which fortuitous events had produced an unexampled activity.

But if these seasons of successful speculation were as transient as they were brilliant, the losses consequent upon them were soon repaired, and the trade of Southern Russia still progressed with rapid strides. A new market was there opened to the trade of Western

Europe, and the importance of this mart became greater as the population of these favoured regions increased, and in proportion to the influence of those new foci of civilisation, the maritime towns. The value of the exports was even surpassed by that of the imports, a difference constantly on the increase. After a lapse of twenty years, the value of the goods imported in the course of one year exceeded by six times the total amount furnished by the custom-house books at the commencement of that period ; as to the exports, their excess was not more than fourfold. Whilst, in consequence of the increase in the population, the importation trade had uniformly been greater, that of exportation necessarily underwent many fluctuations. The reason is evident :—Southern Russia purchases articles of which she stands in actual need, and which she cannot produce ; whilst, in her turn, she can duly offer the foreigner goods in which Western Europe herself abounds, and for which she never applies, except when the failure of her own harvests compels her. If the quantity of grain exported has varied considerably from one year to another, still greater fluctuations have taken place in the price of this commodity : the tchetvert of wheat, which at one time sold for forty-five roubles, has frequently been bought for seven.

This great depreciation of this species of produce

has, however, had a beneficial effect, by compelling the population to redouble their efforts in order to create new sources of wealth. In fact, the iron and copper transported upon the Don to Taganrog have often found there an advantageous sale. At this time, even the furs of Siberia have obtained good prices at Odessa: the quantities of wool, wax, cordage, hemp, flax, and grain, requisite for the manufacture of oil, sent by Southern Russia, becoming more considerable every year, the nature of this city's commercial relations with abroad has already partly ceased to be what it was; and perhaps the time is not far distant when the exportation of grain will no longer be considered as the staple of its commerce.

The transit law promulgated in 1818, and the opening of the free port of Odessa, were productive of such happy results, that during the years 1820 and 1821 the trade of that city was more prosperous than ever. Subsequently, the different wars of which the south of Europe was the theatre, crippled it to so great a degree, that the commercial losses of Odessa were very serious. Thus the various capitals employed in the trade of this town, which in 1821 amounted to 10,760,000 roubles, did not the following year exceed 7,190,000 roubles; in 1823, 5,804,000 roubles; and in 1824, the total was not above 5,668,000 roubles,—

a sum which must naturally be expected to diminish still further in succeeding years.

To compensate, however, for this, the treaty of Adrianople, by which the navigation of the Black Sea was declared for ever free, and the passage of the Bosphorus opened to all flags without exception, introduced a new era of prosperity for the ports of Southern Russia.

Notwithstanding deficient crops, which for some time deprived these countries of their natural resources, their commercial activity has redoubled. The yearly balance of trade has constantly been in favour of Russia, and particularly so at Odessa : indeed, a mere cursory glance at the actual trade of this city will suffice to prove that the impulse it has received will be permanent. In 1835 the value of the foreign imports amounted to 17,539,197 roubles, a sum exceeding by 2,550,068 roubles the balance of the preceding year ; on the other hand, Russian produce was exported to the amount of 23,981,234 roubles, that is, 4,707,800 roubles more than in 1834, although the corn trade was insignificant when compared with that of former years, 378,100 tchetverts only having been sold for 6,673,091 roubles, whilst in one of the preceding years Odessa had exported more than one million and a half of tchetverts.

An account published on the 30th June, (12th July,) of the commerce of this city during the first five months of 1836, allows us to anticipate still more prosperous results for the present year ; the more so, as the very evident increase in the exports exhibited by that account is owing much more to the new branches of agricultural industry than to the corn trade. Western Europe is fully aware of the advantages offered it by this market, which is daily increasing in importance ; the beneficial influence exercised by the growing prosperity of the commerce of the Black Sea upon the interior of Russia is incalculable, and if we have already been justified in congratulating ourselves upon these results, what brilliant hopes may we not reasonably indulge for the future !

RUSSIAN COLONIES IN AMERICA.

IN directing our attention towards those European colonies which are established beyond sea, we can frequently congratulate ourselves upon the happy influence they have exercised over nations as wild and uncultivated as the regions they inhabit. But the details of their history prove to us that there, where the beauty of the climate and the richness of the soil appear to hold out peculiar advantages, the colonists have not known how to turn them to account; whilst in other parts the new settlers have had to contend against obstacles made, as it were, for the express purpose of discouraging them. The Russian colonies, especially in North America, bear scarcely any resemblance to the other European establishments which occupy the greater portion of that vast continent.

Thick fogs continually brood over these shores;

some parts of the country, bristling with mountains of difficult access, present at every step impenetrable forests and extensive morasses ; others, wholly without vegetation, offer to the eye nothing but sterile rocks. In short, the nature of the climate, and that of the soil itself, equally oppose prodigious obstacles to agriculture. The Russians have, therefore, been obliged to imitate the aborigines in renouncing all attempts to form permanent establishments in the interior, and in fixing their abode upon the borders of the sea ; it being there only that the chase, fishing, and trade, could furnish them with the means of subsistence.

The Russians also who inhabit this remote part of the empire do not repair thither as to a settled home, differing in this from the practice of every other colony. They consist either of officers in the Imperial navy and civil *employés*, who again quit these shores after a service of five years, or else of mechanics and workmen sent by the American Company. These latter, whose engagement is for seven years, also return home upon that term having expired ; and, even during the time of their sojourn in the colonies, their names still remain upon the registers of their district, and the class to which they originally belonged : exempted only from the conscription, they still continue to pay taxes ; in short, the place of

their birth still continues to be regarded as their legal abode.

Whilst the European population is thus from time to time renewed, it has been observed with regret that here, as upon the eastern coast of the new continent, the character and habits of the aborigines oppose great difficulties to every attempt made for the purpose of enabling them to participate in the benefits of civilisation. Indeed, the history of the English colonists might induce the belief that the tribes wandering through the vast forests of America, and living upon the produce of the chase, are not susceptible of so great a blessing. In vain have the colonists brought them its germ, by introducing laws for the protection of labour, property, agriculture, and the first rudiments of commerce; these people prefer withdrawing themselves by flying into the depths of their woods, or if some few do remain, they quickly pine away and perish like some wild plant transferred from its natural bed into the green-house. In the Russian establishments, likewise, many attempts of this description have proved abortive. Although the company have cultivated at Hadiak, and in the islands of Ounalachka and Askha, (spots where the nature of the soil allowed them some hopes of success,) fields which at least produced the potato, and although they have also reared cattle there, nothing could induce the natives to follow this example.

The musket is undoubtedly a very useful gift for nations who live by hunting, but this weapon has only rendered the chase more easy, without in the least degree producing any amelioration of the savage habits of the American. In short, although a numerous population has not disappeared, as upon the banks of the Hudson and the Delaware, villages formerly inhabited are now wholly deserted. But the American Company have not been discouraged. Since its first establishment, and more especially since its reorganisation in 1821, it has never relaxed its generous efforts for putting an end to evils apparently inevitable. The inhabitants of Kadiak and of the Aleontic Isles, treated like all the other nations subject to the Russian sceptre, pay neither taxes nor tribute; the sole obligation imposed upon them is that of remaining three years in the service of the company, which has the right of employing them during that time in hunting, fishing, or in agriculture, paying them for their labour the price fixed by a tariff. The inhabitants of the American continent, three tribes only excepted, and those of the Kouryles, are exempted even from this duty. Hospitals and schools are established at Novo Arkhangelsk at the company's expense, which also takes upon itself the maintenance of the orphans and children of those among the tribes whose family is

numerous. In these schools the children are taught reading, writing, arithmetic, and the precepts of religion. The priests attached to the churches of these colonies occasionally traverse the remotest regions, and, thanks to their zeal, the inhabitants who become really converted to the christian religion are now sensible of its vast benefits.

The condition of the Creoles, born of Russian fathers and native mothers, has been equally the object of a benevolent solicitude. The people thus born enjoy all the privileges granted in Russia to the class of tradesmen, besides which they are free from all taxes. If, however, they have been brought up at the company's expense, the latter may retain them in its service for the term of ten years. Many of them have been educated in the schools at St. Petersburg; others have obtained employment in the colonies; others again exercise trade there, and some command vessels belonging to the company.

But the company's task is not yet ended; greater improvements are still necessary: their generous efforts have not, however, proved fruitless; already for several years the number of the population has remained stationary, mortality has diminished, and emigration ceased,—all of which circumstances are highly important.

CULTIVATION OF
THE VINE, THE MULBERRY TREE, AND
THE SUGAR CANE,
IN THE SOUTHERN PROVINCES.

OWING to the vast extent of her empire, and the great range of her temperature, Russia is enabled to cultivate successfully the productions of every clime. How striking is the difference between those provinces whose only dependence is upon the sale of their furs, and those where the vine grows in wild luxuriance along the margin of their native streams! It may not only justly be said that one half of the empire serves as colonies to the other, but that the kind of cultivation of which these different countries are susceptible may be varied to infinity. Throughout the empire, associations, encouraged and protected by the government, are actively engaged in developing that kind of labour best

adapted for each locality, and in discovering new sources of national opulence. Each province possesses means of wealth peculiar to itself; some owe their prosperity to the free trade, others are indebted for it to their labour in the mines; corn and cattle constitute the riches of the central districts, while the southern ones abound in productions still more precious.

Favoured, however, as these countries are with abundant harvests, the produce of a genial climate and a rich soil, their rural occupations should not be confined to the growth of grain alone; indeed, nature herself appears to have suggested the kind of husbandry best fitted for these regions, by adorning the banks of the Don with festoons of the vine, the spontaneous production of the soil. The government, far from confining itself to the encouragement of mere private speculation, has taken a most lively interest in these labours, not only by originating them, but by making itself responsible for the first attempts.

Schools for the vine-dressers have been established in several provinces, and gardens of sufficient extent for making their experiments upon a proportionate scale allotted them.

Simultaneously with these, another mode of production, equally valuable and well adapted to these climates, has been the object of the government's con-

stant attention, proofs of which may be seen in the vast plantations of mulberry trees, which have been formed near all the principal towns of the southern districts.

Every requisite facility, every privilege calculated to insure success in the production of silk, is, moreover, afforded to all who may be disposed to embark their property in undertakings of this description, be they individuals or companies. Not long since, a few capitalists, who purposed growing the mulberry tree in the provinces on the other side of Mount Caucasus, obtained, by way of encouragement, the following valuable indulgences. A government grant made over to them, for the period of thirty years, all the plantations belonging to the crown in the province of Chelkinsk; they were exempted from rent for five years, at the expiration of which time it is to commence at the rate of twenty per cent., over and above the annual revenue which these forests brought into the public treasury from the year 1830 to 1836. The peasants who, living upon these domains, have hitherto worked in the plantations, are required to render the same services to the company, receiving as wages one half of the cocoons. In addition to this, the government has presented to the company five thousand dessetines* of waste land, to be assigned to them, in

* The dessetine is a Russian superficial measure containing

lots of about five hundred dessetines, in the several trans-Caucasian provinces. Upon condition of forming new plantations there, the company will enjoy the grant for thirty years, during which period it will not only be exempt from all public taxes, but will also participate in the privileges and immunities granted to merchants who are members of the first geld.

In conferring these and similar indulgences, the sole object of the government has been that of encouragement, without any wish to dictate the course to be pursued by the speculators ; as a proof of which, it is expressly stated in the ukase authorising the company, that the said company shall possess no monopoly or exclusive privilege whatsoever, and that nothing thereby granted shall prevent or hinder any other company, formed on a smaller scale, from establishing itself in these provinces.

Such are the means employed for imparting greater activity and giving a fuller developement to this description of enterprise, and success has partially realised the hopes conceived ; but, at the same time, it cannot be denied that the results obtained in seven or eight different provinces are not equally

2,400 Russian square fathoms, equal to 13,066 $\frac{2}{3}$ English square yards, or 2 acres 2 roods 32 perches ; hence ten dessetines equal 27 English acres nearly, and 5,000 dessetines equal 13,500 acres nearly.

satisfactory. In the government of Kharkoff the cultivation of the mulberry tree makes scarcely any progress, although not less than fifteen thousand trees have annually been planted there at the expense of the crown : in that of Catherinosloff the growth of them is almost exclusively in the hands of the German colonists. To compensate, however, for this, fresh efforts have been made in the central provinces of the monarchy, as far even as the governments of Minsk, Poltava, and Mohiloff, where several proprietors have within the last year, endeavoured to naturalise the plant ; in other parts of the empire the progress has been rapid.

The government of Kherson or Cherson, for instance, which, in 1829, could only furnish three poods ten pounds of silk, produced last year not less than forty poods, the greater portion of which was purchased by the manufactory of Kichenoff at the rate of ten to twelve roubles per pood ; nor, thanks to the activity diffused through the province by the continually increasing commerce of the maritime towns, is the condition of the vineyards less prosperous. The amount of the harvests is every year further augmented by the produce of lands recently cleared by the German and Bulgarian colonies, especially in the vicinity of that young but promising town of Odessa, which has become the focus of so many and such

various interests; and although the quantity of grapes sold was very considerable in 1835, not less than 212,000 vedros of wine have since been made, being twice as much as in the preceding year.

Great, however, as is this increase, it is clear that even this province cannot long compete with two others, destined, according to all appearance, to become the centre of these two branches of Russian industry,—we mean the Crimea and the countries situated at the base of Mount Caucasus.

But even among these provinces, embellished as they have been by nature, and peculiarly adapted for the cultivation of the vine and the mulberry tree, a difference exists; for although the climate is alike genial in each, and the soil of the one not inferior to that of the other, man's activity has not been equally exerted in both.

In the Caucasian provinces, where cultivation is yet in its infancy, the inhabitants know not how to turn to account the riches which nature has poured forth so plentifully before them. The towns also are few, the communication between them difficult, and the price of necessaries of every kind too low to encourage trade; the consequence of which is, that the new plantations of mulberry trees, formed by government every year, are frequently neglected; and whilst the wines produced from the gardens of the

vine-dressers' school are sold at twelve roubles a vedro, the price of those sold by the proprietors never exceeds one rouble sixty copecks. Moreover, the year 1835 proved a very disastrous one; the severe frosts in the spring, so prejudicial to vegetation in general, destroyed immense numbers of silk-worms, so that these provinces have produced only about nine hundred thousand vedros of wine, eighty thousand of brandy, and one hundred and eighty poods of silk, quantities considerably less than those of preceding years.

In the Crimea, on the contrary, where Russian proprietors have endeavoured to employ their capital to advantage by clearing the waste lands, such activity has been manifested, that the improvement exceeds hopes at one time deemed extravagant. The government had granted land upon the condition, now everywhere fulfilled, that the vine should be cultivated. In the north-west coast of the Peninsula, 835,000 feet of ground have been planted with the vine during the course of last year; yet however great this number may be, it is nearly 100,000 short of those planted in 1831 in this part of the Taurida. Not less activity is apparent in the other districts of this province, and the sum-total of vines planted this year amounts to 1,454,000 feet, the annual produce of which will be, in five or six years, at least 75,000 vedros. Although the harvest of 1835 was a third less than that of

1831, the quantity of wine produced amounts, notwithstanding, to 356,000 vedros, the superior qualities of which are worth as much as twelve roubles per vedro. To such a degree have experiments been carried by bringing offsets, sometimes from the borders of the Rhine, and at others from France and the islands, that in the gardens belonging to government not less than six hundred varieties of the vine are now cultivated.

The production of silk is less flourishing in the Crimea. In 1835 the whole province furnished only seven and a half poods. This quantity is, however, double that of the former year, and everything promises further improvement. But although accident may sometimes retard the progress of cultivation, and a less abundant harvest may occasionally ill requite the labourer's toil, these sources of wealth are not the less secured to Russia; and the amount of their produce sufficiently attests the importance of them: 90,050 feet have been planted with the mulberry tree in the southern countries during 1835, and 13,302½ dessetines with the vine, the produce from which has been 62,369 poods of grapes, 1,111,209 vedros of wine, and 82,600 of brandy.

Amongst several agricultural experiments lately made in the Caucasian provinces, two appear particularly interesting.

In some parts of Leukoron, on the borders of the Caspian Sea, the sugar-cane has been for a considerable time in cultivation, constant care being taken to remove the roots from the earth on the approach of winter, to be replanted in the ensuing spring. Last year Yegor Mamveloff, living at Kislar, sent for some of these plants, for the purpose of introducing the cultivation of them into the neighbourhood of his native town ; these, after being planted, have completely succeeded, notwithstanding the severe colds to which they were exposed in the spring. The cultivation of the beet-root would, it is generally supposed, be more advantageous, but of this experience will soon convince us ; at all events, it would be exceedingly gratifying to ascertain whether or not the sugar-cane can flourish in so high a latitude. Another experiment, made in the course of the same year, is of still greater importance and more certain utility,—that of the cultivation of indigo (*polygonum tinctorium*,) an account of which will be found in the St. Petersburg Journal of the 23rd of May last, No. 62.

SKETCH OF THE LABOURS
OF THE
ST. PETERSBURGH ACADEMY OF SCIENCES,
DURING THE YEARS 1835 AND 1836.

UNREMITTINGLY engaged in enterprises as vast as important, the St. Petersburg Academy of Sciences has frequently despatched various scientific expeditions, sometimes towards the remotest parts of Europe, or the wild mountains and desert plains of Central Asia, and at others to the shores of the Caspian Sea, or the banks of the Frozen Ocean. Thus, in the year 1835, one of its members, M. Sjogren, traversed the valleys of the Caucasus, studying the manners and language of their inhabitants in general, but more particularly those of the Ossetes, a race in which Klaproth thought he could recognise the Ases and the Alans of the time of the lower empire.

About the same period, M. Parrot visited the Lake

of Bourtrick, in Livonia ; and being provided with all the necessary implements, succeeded in obtaining from its bottom a large quantity of fossil bones, especially the teeth of an unknown animal of the Taurian tribe.

During the year 1835 the Academy published two new volumes of its memoirs, together with sixty essays, or treatises, which had been presented to it. Of this number twenty-four are upon the subjects of mathematics and natural philosophy, twenty-six upon natural history, and ten upon general history, philology, and political economy. Of these papers fifty-two are the productions of academicians, while the remaining eight have been contributed by learned foreigners.

The superb collections of the Academy were greatly increased in 1835. The library especially was enriched by a splendid donation of the Emperor, consisting of a considerable number of literary works written in the principal languages of Central Asia. This collection is composed, first, of a selection of Chinese and Mandjour books, maps, and plans, as well as several productions of the Japanese, Thibetian, Mongul, and Indian literature ; second, of seventy-three manuscripts in the Sanscrit language, formerly the property of Colonel Stuart ; and third, of forty-three works in the Mongul and Thibetian language, collected at Pekin by the archimandrite Peter.

Such were the various labours of this Academy within the short space of a single year. Those which engaged its attention in 1836 were, perhaps, still more interesting. New regulations have been introduced at the desire of the Emperor, who was anxious to impart to it a greater efficiency and energy. In conformity with these, the number of the academicians in the three classes will be twenty-one, with ten assistants; the number of academicians extraordinary, and of honorary and corresponding members, is unlimited. The sums allotted for the expenses of the establishment are, by the new arrangement, raised from 206,100 roubles to 241,800 roubles. The endowments of the different collections belonging to the academy have experienced a still greater augmentation, since, according to the old regulations, they did not exceed 14,000 roubles per annum, and now 62,000 roubles, including 36,700 roubles, may be yearly laid out for such purchases as the Academy may judge fit. In addition to these sums, the Academy has also at its disposal the profits arising from the almanacs and journals under its immediate direction. These amount annually to 150,000 roubles.

His Majesty the Emperor has also more than once been pleased to assist this institution with pecuniary advances, in order to facilitate the execution of some important enterprise: 50,000 roubles were, with this

view, placed at the disposal of the Academy during the course of the present year, in order to meet the expenses of a most interesting expedition undertaken to determine by trigonometrical admeasurement the difference of level between the Black and Caspian Seas. The results are not yet obtained; but from the exactness with which the experimental level taken in the neighbourhood of Dorpat has been made, there is every reason to hope they will add equal honour to the Academy and its learned members.

Several other scientific journeys have been undertaken simultaneously by different members of the Academy, among which we may mention that of M. Trinuis, whose object is to visit the rich botanical collections of Europe; that of M. Brandt, whose intention is to be present at the grand meeting of German physicians and naturalists at Jena; and, lastly, that of M. Nordman, who purposes making researches in natural history in Ahkhasia, Gouriél, Mongrelia, and Imeritia.

The activity of the Academy in the various branches of science and literature has not been less remarkable. As proofs, we may adduce the interesting and learned papers of MM. Weinmann, Schmidt, Baer, Trinuis, Brandt, and Kupffer. Several other literary works, of equal if not superior interest, are on the point of appearing, particularly the micrometrical admeasure-

ment of compound stars, by the celebrated astronomer M. Shuive, the first volume of M. Bouniakovsky's dictionary of the mathematical sciences, and M. Schmidt's researches upon the language of Thibet, to be followed by a grammar and dictionary of that tongue.

The Academy has also undertaken the publication of four Memoirs upon the north-west coast of North America and its inhabitants, as well as of Dr. Fritzches' work upon the pollen of vegetables, and Dr. Gebler's essay upon the Katoune mountains.

In addition to the labours we have just enumerated, the Academy has also published eleven new editions of its Memoirs, besides a new journal under the title of *Bulletin Scientifique*, several numbers of which have already appeared. The journal contains extracts from memoirs read at the Academy, interesting portions of its correspondence, and general information upon subjects connected with science and literature.

In the sittings of 1836, eighty-six different memoirs were read, of which thirty-five were physico-mathematical, thirty-eight upon natural philosophy, and fourteen upon history, philology, and political economy. Of the eighty-six, sixty-two were contributed by academicians, five by employés of the Academy who are not members of it, fifteen by correspondents, and five by literati not included in either of the above classes.

The collections of the Academy receive continual acquisitions from abroad, as well as from the different governors of provinces, even the most distant ones.

We must not omit to mention the magnificent observatory now in progress under the direction of a commission, having for its president Admiral Greig. This grand work, erected upon the mountain of Pultowa, sixteen wersts from St. Petersburg, is not less remarkable for its vast and beautiful proportions than for the superb collection of instruments, which have cost no less a sum than 231,281 roubles. The total expense of this building will amount to more than 1,000,000 roubles, and the Emperor has assigned it an annual sum of 17,200 roubles. It is expected that at the close of 1838 the Russian astronomers will commence their learned labours in the most vast, most beautiful, and most complete observatory in Europe.

TECHNOLOGICAL SCHOOLS

ESTABLISHED IN THE ALTAI MANUFACTORIES.

THE progress of public instruction in Russia becomes every day more rapid ; every year new schools are opened for the rising generation, but the distinguishing characteristic of the era is the organisation of a great number of technological schools, the object of which is to fit the pupils for a particular calling. Not only do the establishments of this description, which are dependent upon the minister for public instruction, increase ; but also others, especially destined to prepare young people for some branch or other of the administration, are formed under the direction of the minister of war, of finance, or of the interior.

A number of new schools have been organised upon this principle, during the present autumn, in one of

the most remote parts of the empire, near the manufactories established at the foot of the Altai. Placed under the direction of the mining commission, which is also under the control of the minister of finance, their object is threefold; first, the elementary instruction of the children of the miners and workmen; secondly, it is proposed to give to such of the children as shall show most aptitude, an education which shall enable them to fill subaltern situations in government offices; and thirdly, to impart to the children of persons employed in the department of mines and manufactures, such information as will enable them to enter the higher schools which are open to them.

For this purpose elementary schools, to the number of fourteen, have been organised near the foundries and manufactories, as well as a departmental school at Barnaoul. Two subsidiary sections are formed for teaching such technological knowledge as would enable the pupils to fill situations in forges, manufactories, and foundries, as well as in mines. The number of pupils is provisionally fixed at 1,275; it is, however, susceptible of increase.

The elementary schools are open equally to the children of *employés* and to those of workmen; children may enter at eight years of age, but must not remain beyond that of thirteen. Whilst they remain

at school, they are maintained at the expense of government, which also gives them every month a trifle in money.

Each school is divided into two classes, and the method adopted is that of mutual instruction. The pupils are instructed in reading and writing ; they are also taught to distinguish the different kinds of minerals, the most elementary parts of arithmetic, and perspective drawing, with the principles of religion.

The elementary schools are also allowed to give instruction to other children than those of *employés* and miners ; but the government does not undertake to give them their food, and their parents are required to pay ten roubles every six months, for which sum the school provides the necessary books of instruction.

After an examination which takes place at the close of the course, one pupil out of a hundred of the second class is selected for advancement to the departmental school.

Should there not be vacancies sufficient for those chosen, such as cannot be immediately admitted remain provisionally at the elementary school, to assist the instructors in the discharge of their duties.

In the departmental school at Barnaoul, eighty pupils are educated at the government expense. The

instruction given in the three classes of the establishment embraces the principles of religion, the Russian grammar, arithmetic, geometry, algebra as far as quadratic equations, drawings, and caligraphy.

An examination of the establishment of public instruction in the department takes place at the end of the year, in presence of the inspector. The successful pupils are passed, as soon as a vacancy occurs, to one of the practical sections above mentioned. The number of youths who may be placed in each is at present limited to ten. There are two classes. In the first are taught the elements of mineralogy and metallurgical chemistry, the use of the blow-pipe, the art of analysing and proving minerals. In the second, the studies include the elements of mineralogy, mechanics as connected with mining operations, subterraneous geometry, geodasy, geognosy, and the practical working of mines.

The instructors for the practical sections are chosen, in preference, from among the officers of the mining corps, and an annual sum of 30,710 roubles has been appropriated for the maintenance of these different schools.

SOME ACCOUNT OF RUSSIAN WOOLS.

THE present state of the growth of wools in Europe is a striking proof that perseverance and activity can often vanquish even those obstacles which nature herself appears to have opposed to the progress of industry. In former times the Merino flocks of Spain (her beautiful climate and mountain-pastures being deemed indispensable for the perfection of the breed) were objects of envy, nor was the hope of competing with her ever entertained. In the present day, Germany alone produces as much wool of the first quality as all the rest of Europe together. Having succeeded in establishing her superiority over Spain, she supplies the manufactories of England with the produce of the fleece, with which also countries in still higher latitudes, as Sweden and Scotland, begin to enrich themselves.

Russia, emulous of her neighbours, was not slow in endeavouring to improve her resources by applying

herself to this important branch of commerce. It is chiefly in three parts of this vast empire that a successful attempt has been made to naturalise the Merino sheep, viz. in Lesser Russia, in the governments comprised under the name of New Russia, and in the provinces on the shores of the Baltic. These different regions, so remote one from the other, are too dissimilar to enjoy precisely the same advantages. Whilst, in the south, a temperate climate and excellent pasture land insured the speculator who introduced this branch of commerce an almost certain prospect of success, the dryness of the soil and the severity of a long winter appeared in Esthonia and Livonia almost insuperable obstacles to the successful result of such undertakings. But here, as elsewhere, proof has been given of the justice of the remark, that man's perseverance becomes more energetic in proportion to the difficulties which oppose his will, and the depreciation of grain having compelled the landed proprietors of the Baltic provinces to create fresh resources, the most rapid improvement in this trade has actually been found to have been made in those governments the least favoured by nature.

It must not be inferred from what has been said above, that the results in the southern provinces have not proved satisfactory : the number of flocks has been constantly increasing, and a very sensible improve-

ment has taken place in the quality of the wool. Scarcely thirty years have elapsed since the first sheep were introduced from the electorate of Saxony, and at the present time there are not less than 250,000 in the sheep-folds of the government of Cherson alone ; as many in the Crimea ; while in the government of Catherinoslaff, where the produce of wool is considered by the agriculturists as their chief source of wealth, the number of Merinos already amounts to 750,000. Thus the exportation of wool *viâ* Odessa increases daily : in 1826 it was only 18,000 poods, sold at the rate of ten roubles per pood. Nine years later, in 1835, 116,000 poods were exported, the price being advanced to thirty roubles per pood. The English especially, who in 1832 had purchased only 1,400 poods, quickly perceived the advantages offered to them by this new market, and in consequence the next year their vessels loaded in the port of Odessa 37,668 poods of wool, and, in 1833, not less than 70,336.

At Taganrog the exports have increased in nearly the same proportion ; and in Little Russia, which exports overland a part of its wools, namely *viâ* Radziwiloff and Brodi, this commerce is acquiring fresh activity.

To sum up, Russia, lately so poor in this species of produce that even in 1824 her exports of it did not

exceed annually 35,000 poods-worth, scarcely 600,000 roubles, sold in 1834 more than eight times as much—that is, 281,450 poods, the value of which amounted to 1,557,066 roubles.

The demands of the cloth manufactories in the interior have, at the same time, become more considerable,—a circumstance which has greatly contributed to enhance the price of the raw material. These manufactories, which have not been in existence above twenty years, already produced, in 1822, about six millions and a half *arsheens*, of which quantity two thirds were destined for the use of the army. In 1830 more than eight millions of *arsheens* were manufactured, and of this quantity two fifths were of a coarse quality, such as is required for the troops ; two other fifths of middling, and the remainder of a fine quality. Already the consumption of Russian cloths is no longer confined to the interior of the empire. China and Central Asia purchase them at Kiakhtha and Orenbourg ; and this trade, insignificant at its commencement, is now become of considerable importance : the value of cloth sold to the Asiatic neighbours of Russia amounted at first, in 1824, to 274,287 roubles only ; in 1833, it reached the sum of 1,618,983 roubles.

But however brilliant such results may appear, those obtained by the governments situated upon the shores of the Baltic are comparatively more so. These

provinces are less extensive and rich than those of the south, the means at the disposal of industry less abundant; nor have they been more than fifteen years engaged in the production of wool. Notwithstanding this, however, 67 sheep-folds in Esthonia could last year produce 53,244 head of Merinos; in Livonia the sheep-folds were 57 in number, and the Merinos 34,205. Although a bad hay harvest has compelled several proprietors to reduce their flocks considerably, this unfavourable circumstance has not deterred other landholders from forming new establishments of this description, so that in the month of January of the present year Esthonia contained 100 sheep-folds and 44,765 Merino, and Livonia 69 folds and 40,104 Merinos.

The last year, three cloth manufactories established at Riga, at Zuitenhoff, and Playden, bought up for themselves all the wool of these two provinces, so that no exports could be made, and the proprietors have reason to be satisfied with the prices they obtained. In general, the wool of these countries is worth from 90 to 100 roubles per pood; that of the seignorial estate of Trikatén has even been sold at the price of 118 roubles. Amongst many other circumstances worthy of remark, as proving the beauty of the Esthonian flocks, we will quote the results of two public sales which took place in the course of the month of May

last. At the seignorial estate of Orrenhoff, ten rams were sold at from 100 to 200 roubles per head; 150 ewes, from 20 to 30 roubles each. At Trikatén, the sheep of which are still more esteemed, 31 rams, 181 ewes, and 128 sheep, were bought at the high price of 3,361 silver roubles,—one ram fetched 121 silver roubles, and another even 131.

These amounts afford sufficient proof of the perfection to which this branch of the national industry has been carried in the Baltic provinces.

TRADE AND COMMERCE OF SIBERIA.

THE active and profitable commerce of the Russian empire with Asia is, perhaps, less important on account of its extent, than from the beneficial influence it exercises over a vast portion of the globe. This trade, by placing the nations of Central Asia in contact with civilisation, becomes a great instrument for improving those wandering tribes, whose habits and characters have undergone so little change during a long series of ages, that at a very recent date their condition was precisely such as it is described to have been in the time of the last crusade by Marco Polo and Rubriguis. This happy influence extends itself even to distant countries not upon the immediate borders of Russia. The most remote parts of Boukharia, the Khanat of Khiva, Taschkent, and Kokant, transmit us their pro-

duce, while our frontiers are visited by their merchants. Thibet itself begins to participate, at least indirectly, in these commercial relations.

The trade of Russia with so many different nations is necessarily divided into a great number of branches, and is carried on through various routes. The Transcaucasian provinces on one side trade with Erzeroum, the commercial entrepôt of Asia Minor, and on the other with Persia. The provinces of this latter empire, which are situated upon the shores of the Caspian Sea, are visited by vessels arriving from Astrakan and Bakou. Numerous caravans bring from the interior of Boukharia and Khiva the produce of that country, to the markets of Orenburgh and Nijny-Novgorod, while in one of the most remote parts of Russia, at Kiakhta, situated at the foot of the Altai mountains, the exchange of the American and Siberian furs for Chinese produce is highly profitable to our merchants.

This part of the Russian frontier, known by the name of "*The Line of the Cossacks of Siberia*," traverses the extensive plains which separate Oural from Altai. The direction of this line from the redoubts of Siberia to the village of Finalka, situated at the foot of the Altai, is in length 1,707 wersts, and is marked by four towns, eleven fortresses, fifteen fortified advanced posts, and eighty-four redoubts.

This vast space is chiefly inhabited by Cossacks, colonised warriors, divided into several regiments; and although other colonists, as peasants, shopkeepers, &c., have established themselves there, the population does not, at present, exceed 45,000. The Cossacks are privileged to trade with the Kirghises without paying the taxes of either of the three gilds; in their military capacity, they mount guard in turn at the different posts; their leisure time is employed in the rearing of cattle, gardening, hunting, and fishing. The territory they occupy is for the most part very fertile, especially between the forty-ninth and fifty-first degrees of latitude, where the soil spontaneously produces fruit trees, melons, tobacco, &c.; while, in the most eastern part, the solitary but picturesque and fruitful valleys of Altai, rich in every description of odcriferous flowers and aromatic herbs, enable the inhabitants to rear innumerable swarms of bees, and to furnish the greatest part of Siberian honey.

Several maufactories, especially that of leather, have been established in the towns; but trade is yet in its infancy, and scarcely developed. Its progress and improvement will doubtless hereafter enhance the value of the natural productions of these regions, among which must be reckoned the lakes of salt water so numerous in the Steppes.

Important as they are, in relation to trade and commerce, these lakes likewise present a series of interesting phenomena to the naturalist. Their waters hold so great a quantity of salt in solution, that the action of the summer heat is of itself sufficient to convert it into crystals, which, carried towards the banks by the action of the waves, form there shoals of salt of an immense extent. Magazines have been formed upon the borders of Lake Koriak, the only one situated on the right bank of the Irtisch, and the salt therein preserved generally amounts to several millions of poods. Large quantities of this article are annually carried across the Irtisch to Tobolsk.

But however rich this lake may be, it is less so than three others,—the Karasback, the Kalkaman, and the Djémantons, situated in the Steppes on the right bank of Irtisch. Each of these basins is from twenty to twenty-five wersts in circumference, and the action of the solar rays produces in them during the summer season crystals of salt so numerous, that by mutual contact they at length form thick and solid arches, which, like winter ice, cover the surface of the lakes. These masses are frequently nine inches thick; the action of the air whitens the upper layers, the lower ones preserve a bluish tint, which in some places assumes a beautiful violet hue, and the solidity of these crystal fields is such, that horses, chariots, and

even camels, pass over them with the greatest safety. Ten other salt lakes are also found between the Irtisch and Redoubt of Siberia.

Such is the aspect of the country along the frontiers of the Russian empire: and beyond these limits extend those immense Steppes, the original country of so many nations which have, from time to time, spread themselves over Europe and Southern Asia.

These vast plains resemble, in more than one respect, the Russian territory adjoining them; but the climate is subject to still greater variations. In summer, the thermometer frequently rises to 34° of Réaumur in the shade: vegetation then becomes parched, and although the nights are always cool, the heat becomes so much the more insupportable during the day, owing to the country being almost denuded of trees. In winter the cold is excessive; violent hurricanes often overthrow the ill-built dwellings of the natives, sweeping away cattle, especially the sheep, to an incredible distance. The soil of a great portion of these Steppes is composed of clay; in others are found immense tracks of moving sands and salt-water lakes. Upon the banks of the rivers, which, unfortunately, are not numerous, the earth is fertile and fit for agricultural purposes, but the inhabitants have not yet learnt how to turn these advantages to account.

The inhabitants, who may amount in number to 3,000,000, are of the Mogul origin; known by the name of Kirghises Kaiassacks, and divided into three different hordes, they may be considered as leading a nomadic life. Their habitation consists of an almost circular tent, the light timber-work of which is covered with a thick felt: amongst the wealthy, the interior is ornamented with silk drapery, and with arms of rich and elaborate workmanship.

Their flocks are immense; the wealthiest among the Kirghises possessing 10,000 horses, more than 20,000 sheep, and a considerable number of goats and camels. These flocks they follow on horseback from pasturage to pasturage. They are as yet unacquainted with the use of bread and of money; sheep may be said to be their circulating medium—at least it is by the number of the latter that these people express the value of objects. The sheep are of a peculiar breed, distinguished by a fleshy tail, weighing twenty and even thirty pounds: their wool, of a reddish hue, being too coarse for spinning, is only used in manufacturing felt coverlets: to compensate, however, for this loss of wool, a single sheep sometimes furnishes five poods of fat.

For some time past the Kirghises have shown indications of commencing agriculture, especially the poorer classes, who cultivate, upon the borders of the lakes and rivers, fields of corn, rye, barley, and espe-

cially millet. But these rude essays have not had the effect of inducing them to remain stationary, as they generally abandon, after the harvest, the fields they had sown in the spring.

But however backward these people appear, their trade with China and Russia is already considerable. From the former they purchase tea, and from the latter European produce.

The following will show the importance of its commercial relations with the Russian empire during the year 1835.

Exportation of Russia.

	Roubles.
Corn to the amount of - - -	431,537
Leather - - - - -	616,523
Iron and copper - - - -	29,315
Metal manufactures - - - -	150,806
Cotton ditto - - - - -	1,797,647
Silk and linen ditto - - - -	90,078
Cloths - - - - -	192,462
Tobacco, glass, drugs, horses, furs, &c.	843,280
Total - - -	<u>4,164,648</u>

Importation from the Steppe.

Cattle to the value of - - -	3,078,483
Raw hides, skins, silk, stuffs, wool and cotton from Boukharia - - - }	1,827,258
Total - - -	<u>4,905,731</u>

DESCRIPTION OF THE
FAIR OF NIJNY-NOVGOROD,
ON THE 15TH AUGUST, 1836.

OF all the large markets which may be considered as forming the chief centres of that commercial movement that connects together the different nations of the globe, none perhaps is more important, none presents a picture more interesting, rich, and varied, than that of Nijny Novgorod at the time of its fair. It is there that the colonies beyond sea annually exchange their produce with Central Asia. Long caravans of camels, laden with the commodities of the Tartar Steppes, arrive from the foot of the Oural Mountains, and from Mount Taurus: the produce of China is transported thither by the way of Kiakhta: vessels sailing up the Volga and the Oka come freighted with merchandise of Persia, and the harvests of the shores

of the Caspian Sea. On the other hand, the Russian manufactories send immense quantities of stuffs of all kinds, and vast warehouses are filled with sugars and coffees, which are brought by the way of Petersburgh and Moscow from the Trans-Oceanic Isles. The nobility of the neighbouring provinces, a great number of the inhabitants of Moscow, and many foreigners, visit Nijny Novgorod at this season, attracted by curiosity, to view a scene which, for the activity, novelty, variety, and singularity it exhibits, is, perhaps, unequalled. The Kirghises, and several other nomadic tribes subject to Russia, likewise bring their flocks and pitch their tents near this town, which affords, during the continuance of the fair, all the conveniences and luxuries of an European capital.

The trade of Nijny Novgorod consists principally of three branches; that of Asiatic goods, that of Russian manufactures, and that of merchandise imported from the West of Europe, and the European American Colonies.

The principal goods there sold by Asia to Europe are such as are furnished by the Chinese trade—especially tea, which Russian merchants procure at Kiakhta, by bartering for it furs and cloths, and afterwards transport to Nijny Novgorod. Of this article 31,000 chests were brought there this year, and sold in a very short time at prices varying from

forty-four to six hundred and fifty roubles the chest. In addition to which, Kiakhta had also sent about 12,000 packages of tea, pressed into the form of cakes, for the use of the Kirghises and the nomadic Tartars inhabiting the Steppes. This article had always been regarded by the Kiakhta merchants as the most profitable object of barter offered them by China. Thus the quantity brought by them this year is double that sold in 1835. Up to the 15th August the quantity sold amounted in value to about 16,000,000 of roubles.

The Boukharians, and the Khiva merchants coming in long caravans from Orenbourg, Petro, Pavlovsk, and Troitsk, have brought 32,000 poods of raw cotton, of which one third was immediately sold. The increasing activity of this commerce deserves attention, as a proof of the progress of various branches of Russian industry. The demands of the cotton-spinning establishments in Russia become daily more considerable: the large manufactories of this description, provided with machinery made in England, obtain the raw material from America, and the importation of this article has, within these few years, doubled in our Baltic ports; the manufactories upon a smaller scale, and the machinery of which is Russian, exert a similar influence upon our commerce with Central Asia, whence they furnish themselves with cotton.

The Boukharians have also brought some manufactures of their own, viz. 10,000 poods of spun cotton, and 110,000 pieces of a coarse species of cotton cloth called *bakhta*. They have also offered for sale oriental stuffs for robes de chambres, to the amount of 50,000 roubles : but the most valuable articles belonging to them are 200 Cachemere shawls, of which they had, up to the 15th of August, sold as many as amounted to 200,000 roubles in value.

Various descriptions of skins also form part of their goods, such as those of the rein-deer, fox, gray or black lambs. Some inhabitants of Taschkent have also offered for sale turquoises to the value of 120,000 roubles. The total amount of the goods brought to this market from Central Asia may be estimated at 3,400,000 roubles annually.

Some of the produce of these countries has reached Nijny Novgorod by an indirect route, that of Astrakhan; the vessels coming from that city being freighted, amongst other articles, with fox-skins to the value of 350,000 roubles, and 8,000 poods of red cotton thread from Boukharia. Astrakhan has also sent to Nijny Novgorod 6,000 poods of rice, together with the produce of its fisheries, 380,000 poods of dried fish, and 12,000 poods of caviar.

Kisliar, and the provinces situated at the foot of Mount Caucasus, also forward their goods by the

Volga to Nijny Novgorod. This year they furnished 12,000 poods of rice, inferior to that of Astrakhan, 140,000 ankers of brandy, and 120,000 vedros of wine.

The Armenians and Persians, inhabiting the most remote provinces of the empire, Tefflis, and the fertile plains on the other side of Mount Caucasus, have likewise brought to this emporium goods amounting in value to 1,500,000 roubles. They consist of skins, musk, and gall-nuts.

The most important trade of Nijny Novgorod is the sale of Russian manufactures, more especially those of cotton, silk, and wool, furnished chiefly by the central provinces of the empire. Although the manufactories have, this year, been more active than ever, yet the demand for their productions has been less at Nijny Novgorod than in the preceding year. The reason is, that the retail dealers in the capitals and in the provincial towns, and even the hawkers who traverse the country, have already laid in their stock at the different fairs of the interior.

To compensate for this, the goods which have been sent to Nijny Novgorod for exportation, have been very advantageously disposed of. The traders of Kiakhtha require large quantities of cotton and skins: the Boukharians and the Khiva merchants purchase nankeens, calicoes, cambrics, cloth, and sugar: the

Armenians of Tefflis, and the Persians, cotton and woollen stuffs. Although less considerable than the former year, the value of cotton stuffs manufactured in Russia, and sold at Nijny Novgorod, amounts to 20,000,000 roubles. The silk manufacturers have less reason to be satisfied with the state of things. Their goods, which amounted in value to 10,000,000 roubles, have experienced a heavy sale. This, however, must have been anticipated, owing to the high prices asked, in consequence of the conflagration at New York, and the failure of the harvest in the south of Italy.

Very considerable quantities of Russian and Polish cloths have been sent to Nijny Novgorod from Kiakhta, the greatest part of which was sold on the 15th of August. The total value of cloths sold, amounted to about 2,000,000 of roubles.

As to the flax manufactures, which have been sold to the amount of 5,000,000 roubles, they are generally in great request. Amongst other articles, there have been sold for the Transcaucasian provinces 7,000,000 archines of cloth of middling quality, 2,000,000 archines of coarse cloth, 150,000 archines of *tche-chowika*, a description of cloth calculated for the Chinese market.

The produce of the Russian mines and foundries forms also a most interesting object of the trade of

Nijny Novgorod: 1,694,514 poods of iron, worth 8,500,000 roubles, were sold last year, and bought for the use of the inhabitants of the interior; as well as 30,000 poods of copper: 25,000 poods of steel, and a considerable quantity of articles manufactured from these metals. The total value of the above articles amounts to 12,000,000 roubles.

The sugar-bakers of St. Petersburg and Archangel have sent to the fair 75,000 poods of sugar, four fifths of which were immediately sold at prices varying from 46 to 53 roubles the pood,—giving an average value of 3,500,000 roubles.

The potassium, about 104,302 poods, was almost wholly bought up for St. Petersburg, at the rate of 9 to 10 roubles the pood.

Much country produce has been sold with good profit for the purpose of exportation, as wax 3,600 poods; 3,000 poods of ordinary wool, fetching from 17 to 22 roubles; 2,500 poods of fine cotton, the price of which was as high as from 50 to 80 roubles a pood; 3,000 poods of camel hair, at 11 to 12 roubles the pood; 12,000 poods of hemp, bought at $5\frac{1}{2}$ to 7 roubles; tow, horses' tails, feathers (2,000 poods,) hogs' bristles, &c., making together in value 1,200,000 roubles; to which must be added 69,050 bottles, and 142,020 half bottles of *Don* wine, which

were sold at the opening of the fair, and fetched 252,408 roubles.

The tan-yards have furnished 11,000 poods of Russian leather, valued at 32 to 43 roubles the pood, and other qualities of the same article in such a large quantity, that the total value of the manufacture exceeds 1,200,000 roubles.

Articles still more precious, considered for ages as the richest produce of northern countries, and as one of the most important objects of commerce, have found their way to the fair of Nijny Novgorod, and have almost all been sold; these are the superb furs of Siberia, and of the coast of the White Sea. The skins of the sable bear, foxes of different colours, beavers, martens, &c., coming from the tan-pits of Moscow, realised a sum of about 3,000,000 roubles: in addition to which, Casan has furnished foxes' and wolves' skins; the tan-pits of Kalouga foxes' skins; those of Yaroslaff hares' skins; those of Mouraschkin lambs' skins; Kargapol, squirrels' skins; Astrakhan, foxes' skins; and Kasmioff, sheep-skin pelisses. The total value of these furs, &c., amounts to 4,900,000 roubles, besides the undressed ones at present warehoused, the value of which is about 3,550,000 roubles.

Russia has also manufactured china and earthenware to the amount of 350,000 roubles; mirrors and

glass of all descriptions to 800,000 roubles, and soap to 750,000 roubles.

The third branch of the commerce of Nijny Novgorod—that of the produce of Western Europe and its colonies—is deserving of notice, although the total value of the goods imported from these countries scarcely equals one tenth part of that of all the merchandise sold at the fair.

Amongst the articles furnished from abroad, those comprised under the general name of drugs claim the first place; the value of these imported this year is 4,900,000 roubles, and those required by our manufactories for the dying of stuffs are most in request; 7,500 poods of indigo, for instance, value 2,305,000 roubles, have been sold in a short time at 340, 320, and 360 roubles a pood, according to the quality; the same has been the case with 1,800 poods cochineal, which fetched 375 roubles per pood; 8,000 poods of madder, &c.

Foreign wines, the total value of which is 2,000,000 roubles, are likewise an important article. The West Indies have sent to the Russian markets 400 casks of coffee, value 500,000 roubles, and 500 hogsheads of rum, value 200,000 roubles. Coral to the amount of 600,000 roubles has been bought by the Kiakhta merchants for the Chinese market.

The sale even of foreign manufactures has also been

considerable. The Kiakhta merchants have laid out no less a sum than 1,500,000 roubles in the purchase of woollen stuffs for the Chinese market; the value of cottons, silks, &c., imported from abroad, and housed in the magazine, amounts to 2,900,000 roubles.

The following table shows the goods put up for sale during seven successive years, that is, from 1829 to 1825 inclusive, together with the goods actually sold.

Merchandise put up for Sale.	1899.	1890.	1891.	1892.	1893.	1894.	1895.
I. Russian Goods . . .	77,789,486	76,438,590	93,812,400	106,309,989	112,435,009	105,603,680	105,519,080
II. Foreign Goods							
a European or Colonial	11,391,950	11,645,900	14,116,825	15,044,892	15,361,152	14,145,250	14,130,160
b Chinese . . .	10,324,500	13,974,300	17,558,825	13,467,800	14,546,250	17,144,675	17,213,000
c Boukharian . . .	2,025,850	774,500	524,650	1,553,025	1,301,500	2,024,100	4,271,500
d Persian, Georgian, and Armenian }	2,351,800	2,148,300	2,700,400	1,831,912	1,781,400	1,556,650	1,452,900
III. Horses and Cattle . . .	135,000	95,600	744,500	735,000	782,000	1,117,000	7,776,000
Total,	103,833,586	106,107,990	129,507,300	138,942,618	146,207,311	141,591,355	165,869,200
Value of Goods sold . . .	50,104,971	91,281,940	98,329,525	116,893,518	117,210,676	107,693,395	117,743,300

HERRING FISHERY IN THE BLACK SEA.

THE herring fishery in the Black Sea, which is most active in the neighbourhood of Kertch, began last year towards the close of the month of November, and promised to be very abundant. Many of the inhabitants of Kertch, knowing by experience the advantage of the Dutch method of salting, united in order to make an attempt at their common expense. The direction of this undertaking was confided to M. Pomerantzoff. Unfortunately the frosts set in soon after, and put a premature stop to the fishing; the experiment has not been so important as was requisite. As an attempt, however, it has completely succeeded: 5,000 herrings have been salted and sold by the company; they were found to be far superior to all that had been salted previously, and were sold at the rate of 100 roubles a thousand.

EXPEDITION FOR
METALLURGICAL RESEARCHES
IN THE OURAL MOUNTAINS.

THE Oural and Altai mines, so rich in the precious metals, possess also a great interest for science. The geologist observes, at every step he takes, new combinations in the primitive rocks, as well as in those of secondary formation : he there sees many phenomena of which the European mountains present no example, and which often discover some law of nature hitherto unknown. The rocks are the more deserving of the attention of the man of science and the miner, inasmuch as they cover an immense tract of country ; America herself scarcely offering to the researches of the naturalist chains of mountains upon so vast a scale, containing so much of the precious metals. In fact, the Oural and the Altai are but two different branches of one and the same chain, which, often taking other names and directions, separates Siberia both from

Europe and Central Asia. The Oural, whose most remote branches towards the north are washed by the waves of the Icy Sea, forms a natural barrier between Asia and Europe, from those high latitudes as far as the steppes inhabited by the nomadic tribes of independent Tartars. After having traversed from north to south the governments of Persia and Orenbourg, and overpassed the frontiers of Russia, this chain forms an angle, taking in the Tartar steppes a direction from west to east ; further on, it again turns back towards the Russian territory : it there appears under the name of Altai, its direction being from south-west to north-east, and extending across the districts of Kolyvan, Nertchuisk, &c., as far as the borders of the sea which separates Asia from America.

It is in that part of these mountains which faces Siberia, in the eastern slope of the Oural and the northern one of Altai, with its secondary branches, that are found the veins of precious metal. It is there that, in the schistous mountains, heaped upon the primitive rocks, are discovered those layers, more or less extensive, of gold or platina ore, so celebrated for their great value. Every year immense treasures are procured from them ; and yet it is probable that all the riches of these mountains are as yet unknown. The field opened for these researches is so vast, that years of methodical and persevering examination have

not yet been sufficient to explore all the valleys and summits, a vast extent not having yet been visited by the officers of the Mining Board.

The examination of these parts, as yet almost unknown, is pursued with the greatest regularity. The two chains, the Oural and the Altai, are divided into several mining districts: in each of them the officers, to whom is confided the direction of the works, send out, every summer, detachments of discovery, whose duty it is to examine, in detail, the mountains assigned to them,—the point at which the expedition stopped the preceding year being generally that of departure for the new one. In the course of the last year two new detachments have been sent off, one of which was ordered to traverse the space between the Aspia and Lopsinia rivers, upon the eastern slope of the Oural, whilst the other was to complete the investigation of the territory included between the Iodel and Lozva, situated upon the same side of the summit.

The first of these expeditions remarked, in the course of its investigations, several phenomena highly important in a theoretical point of view; new combinations of porphyry, or rather species of rock belonging to this primitive formation—such as the diorytics, the spillite, and the trap. In other respects it has not been fortunate in its researches. After boring upon the banks of eleven small rivulets, which descend from

this part of the Oural towards the plain, gold was found in the sand of five of them, but in so small a proportion that the working would not be attended with any profit. A mine of native copper, discovered in 1832 upon the left bank of the little river Mania, was also considered as too inconsiderable to be worked.

The second expedition has had better success. Having commenced its operations upon the banks of the rivulet Ouspensk, their efforts, after several disappointments, were at length rewarded by the discovery of two tolerably rich layers of gold sand.

The one is upon the Ouspensk, two archines from the surface of the soil; it extends about 100 sagues, its breadth being 8 sagues, and thickness $1\frac{3}{4}$ archine. The sands are not equally rich throughout the whole extent. Some have been found containing only $\frac{1}{2}$ zolotnik of metal for every 100 poods, whilst others contain $8\frac{1}{2}$ zolotniks. The average is about $3\frac{1}{8}$ zolotniks of gold for every 100 poods. The cubic sagene of sand weighs about 1,200 poods, and the layer being about 466 sagues 18 archines (cubic measure), its produce of gold would be probably 3 poods 14 livres 86 zolotniks.

The other bank of gold sand, found at between three and four versts from the first, upon the Kamenka, is only 4 sagues in width, and 200 in length, and its

thickness is $1\frac{1}{2}$ archine. The gold it contains varies from $\frac{1}{4}$ of zolotnik to $8\frac{1}{4}$ zolotniks for 100 poods of sand, the average being $3\frac{1}{4}$ zolotniks. The layer being 490 cubic sagues, it may be expected to yield 4 poods 12 livres 18 zolotniks.

PRECIOUS STONES FOUND IN THE OURAL MOUNTAINS.

SINCE the discovery of rich mines of the precious metals in the Oural mountains, the government has adopted every means in its power to facilitate the working of them, to regulate the works proposed to be executed, and to acquire a more extensive and accurate knowledge of the treasures they contain. Learned and scientific individuals have been employed in these researches, and the results, important as they are for trade, have not proved less so for science.

It is thus that the precious stones hidden in the cavities of the rocks in the vicinity of Mourzenka, have become the object of scientific examination, after originating a new branch of industry.

The town of Mourzenka is situated in the department of Catherinebourg, at the foot of the Oural. The rocks of the environs are composed of the same granite which, upon the declivity opposite the Oural on the eastern side, contains mines of gold and platina,

so important on account of their rich produce. The thickness of this mass of primitive rock is from 10 to 20 versts: its direction is north and south, and precious stones are there found scattered over a space of about 100 square versts, watered by three rivers, the Newa, the Alabaschka, and the Ambarka. In that variety of granite known to geologists by the name of Pegmatite, are here found the topaz, shorl, aqua marina, rock crystal, and amethyst.

Another circumstance equally worthy of remark is, that the fields in the environs of Mourzenka are covered with large blocks of granite, which a violent convulsion of some unknown period has torn away from the summit of the mountains and hurled into the plain below: these fragments likewise contain precious stones. Sometimes, also, on the borders of the rivulets have been found topazes and amethysts, scarcely concealed by the mud and clay of their banks.

It was at the commencement of the eighteenth century that the government, in the hope of finding marble and jasper for the embellishment of the new capital of the empire, ordered the Oural to be examined by competent persons. These agents found, in the vicinity of Mourzenka, a few crystals and transparent stones: this discovery did not excite all the interest which it merited. At length, in 1765, the Empress Catherine despatched some Italian lapi-

daries, whom she had engaged in her service, to Catherinebourg and Mourzenka ; and from that time stones of great value have constantly been found there.

In 1828 was found, near Mourzenka, in the mine called Aarjeosk, a superb crystal, weighing 6 pounds 11 zolotniks, being about $5\frac{1}{2}$ verschoks, or $8\frac{1}{3}$ English inches in length, and $6\frac{1}{2}$ or 10 English inches in circumference. This beautiful specimen is preserved in the mineralogical collection of the Board of Mines.

THE CHASE IN THE RUSSO NORTH-AMERICAN COLONIES.

REMOTE and hazardous expeditions always possess a character of adventure and romance, which strikes the imagination while it interests the feelings. The privations to which those intrepid navigators expose themselves, who, in order to widen the domain of science, endeavour to discover a passage through the ice of the Polar Seas, and the dangers by which we see them continually beset, powerfully command our sympathy. Nor can we view with indifference either those hardy whalers who annually revisit the stormy seas in which they have so often braved the severities of a rigorous climate and the perils of a difficult navigation, or the courageous perseverance of those mariners who seek, in remote and almost unknown shores, new markets for the produce of their country.

If such enterprises, even when isolated, command the attention we bestow on them, how much more is our interest excited by an association formed for the purpose

of pursuing, systematically and upon a vaster scale, all these various branches of activity. Such is the American Company, which was at first established with the view of extending the beaver hunt in the Russian colonies, and of enlarging the fur trade, so important in the relations of Russia with China. Since the origin of this company, we have seen its agents living upon the shores of Russian America, amidst all the privations imposed upon them by the nature of the country, occupied with useful enterprises, scientific researches, and with the care of making, as far as possible, the aborigines of these sterile regions participate in the benefits of civilisation.

The otter chase still constitutes their chief occupation. In former times the inhabitants of the Aleontian Isles paid a tribute of furs, but since the establishment of the company they have been exonerated from this, personal service being substituted instead of it: every native of these isles, or of that of Kodiak, is obliged to place himself for three years at the disposition of the company, which may employ him, as it pleases, either in hunting, fishing, or agriculture.

In the month of December every year, the company announces the number of men and small boats it will require for beaver hunting. The hunters are then chosen, the preference being given to families having the greatest number of sons; these the company fur-

nishes with arms, powder, lead, dried fish, tobacco, and the utensils necessary for repairing the boats. Immediately upon the breaking up of the ice, the *baidaiies* (small vessels) quit the creeks in which they had been laid up during the winter, and repair to the place of rendezvous; the different expeditions afterwards set off for the points assigned them, each under the direction of an *ancient*, chosen by his companions. Kodiak generally furnishes one hundred and fifty boats, Ounalachka one hundred, Atkha fifty, the other islands a less number.

Upon their return, in the month of August or September, these different detachments deposit the produce of their chase in the stores of the company, which pays them according to a stipulated tariff, giving at the rate of thirty roubles for a beaver skin of the first quality, deducting, however, from this price the value of the ammunition and provisions previously furnished to the hunter.

The otter is not the only game hunted during the summer; other vessels are employed in pursuing the aquatic birds, which alight in such numerous flocks on the coasts of the peninsula of Alackha. Their skins are bought by the company; their flesh, being dried, serves as food for the inhabitants of the country. The pursuit of the sea-calves is more dangerous. The Aleontians engaged in this difficult chase endeavour,

at first, to cut off the retreat of these formidable animals, which lie basking themselves in the sun upon the sea-shore; they then attack and kill them with their hunting spears. The teeth are the only valuable part of the animal, and in successful seasons the chase is so productive as to furnish as many as five thousand.

Several whalers fitted out at the company's expense likewise cruise annually in these seas. The Aleontians strike the whale with harpoons, the barb of which is of jasper: each individual engraves upon the stone of his harpoon some private mark by which he may recognise it, so that it is always easy to ascertain the party who has dealt the mortal blow to the animal. One half of the whale belongs to the successful harpooner, the other one is the property of the company, subject to their paying to the rest of the crew from twenty to forty roubles. Further facility has lately been given to this trade, by furnishing the whalers with superior implements. Vessels constructed upon the model of those of the English will render the fishery less dangerous, and the company has recently engaged in its service several experienced harpooners. The number of whales killed annually varies from thirty to fifty; but, owing to the above intended improvements, it will doubtless become still more considerable.

During the winter the colonists are engaged in

other labours. Snares are laid for the white foxes, and dogs regularly trained to track the zizel (*mus cytellus*) in its subterranean abodes.

The company's vessels then transport all the furs so collected during the year to Okhotsh, whence they are sent overland to Kiakhta, a town situated upon the confines of the Mongol Steppes, and remarkable for its immense commerce with China.

Immediately after the establishment of the Russians upon the western coast of North America, the chase proved equally easy and abundant; the consequence is, that it was prosecuted to such a degree, that the beaver and the fox have now become rare. The hunting parties are at present obliged to proceed to more distant points.

The country, however, is so vast, the coast of such great extent, and the islands so numerous, that no apprehensions need be entertained as to the productiveness of the chase. Oftentimes islands, for a long time concealed by the constant fogs of these climates, are discovered by chance, and open a new field to the activity of the company's agents.

Thus the marines who first landed on the Prebyloff Isles, (St. George and St. Paul,) to the north of Ounalackha, were astonished at the number of otters and sea-calves of different species which they disco-

vered there. The company having formed some permanent establishments in these isles, for so long a time uninhabited, have cultivated the potato and the turnip.

TEACHERS' INSTITUTION AT ST.
PETERSBURGH.

THE principal object of this establishment is the rearing of teachers for the different gymnasia and lyceums throughout the empire, and the studies of the pupils have consequently been directed with this view.

Ninety-six young persons, duly qualified according to the regulations of the institution, were first selected from the public schools for entering therein, and five ordinary, three extraordinary professors, and five assistants, commenced their labours with a preparatory course. In this class of the Institution, which is not divided into different faculties, the studies embrace logic, metaphysics, mathematics, mythology, the Latin, Greek, German, and French languages, together with rhetoric and Russian literature ; architecture and drawing are likewise taught, to which have recently

been added dancing and fencing. Every pupil participates in all the lessons, and this preparatory course is terminated in two years.

The first examination, in which the pupils were to exhibit the progress they had made, began on the 15th September, 1831, continued till the 12th November, and publicly terminated, in the presence of a numerous audience, on the 11th December. The results of this examination were as satisfactory as could be desired; seventy-eight of these young persons were considered worthy of entering as students the upper class of the institution, which was then formed and divided into three faculties. Under the superintendence of twelve ordinary and five extraordinary professors, assisted by masters in drawing, fencing, and other arts, the students are at liberty to enter any one of the three faculties, and to devote themselves to the study either of philosophy and jurisprudence, the exact sciences, or lastly of philology and history. This course lasts three years, after which time they must exercise themselves in the practice of instruction.

The collections belonging to the institution, which are every day receiving fresh additions, are already considerable; the library at present consists of 7,000 volumes; the philosophical apparatus are sixty-eight in number, the mineralogical cabinet reckons 4,233 objects; their plants amount to 9,399, not

including those indigenous to St. Petersburg. A zoological collection is also in progress.

The first examination of the students of the upper class, which took place in the month of December, 1835, has proved how successful have been the labours of the institution,—thus affording a reasonable hope that its activity will be incalculably useful for the public instruction.

INCREASE OF THE POPULATION IN RUSSIA.

It has been remarked that a population equally unacquainted with every branch of national industry and commerce, and whose means of existence are consequently limited, not only increases slowly, but oftentimes remains stationary. If at a later period this ignorance be replaced by knowledge and a spirit of enterprise, the onward march of the community, as to numbers, is rapid, and evident to observation. Such has been precisely the case with Russia.

From the time of Peter the Great, and more especially under the reign of Catherine II., up to the close of the last century, when the institutions founded by the creative hand of that monarch began to put forth their fruit, the progress exceeded every hope. Since the commencement of the nineteenth century, the population of those professing the Greek religion,

during a period of thirty years—that is, from 1804 to 1834—it would appear that, due allowances being made for the adventitious influence of war, bad harvests, &c., this increase continues to become a little less rapid.

At least we learn from these tables, that during the first ten years of this period, from 1804 to 1814, the number of children born in Russia amounted to 13,148,000, that of persons deceased to 9,064,400; during the ten succeeding years, from 1814 to 1824, the number of births was 14,798,000, deaths 8,994,000; and lastly, during the ten years elapsed from that time to 1834, 17,848,000 were born, and 12,501,000 died.

During the first of these decennial periods, therefore, the population increased 4,086,000 souls; during the second, 5,804,000; and during the last, 5,347,000. It will also be seen that the number of births, although it has become greater *per se* towards the end of the period so indicated, is, however, less considerable when compared with the population already existing, and with the number of deaths.

Whilst, in any given year of the last century, the number of births surpassed that of deaths in the proportion of 183 to 100,—the proportion during the first of the three decennial periods above has been 147 to 100; during the second, under the happy influence of profound peace, 164 to 100; and during the third, of

146 to 100 only. The second decennary, therefore, has been more favourable to population than the last ; and we may conclude that the first would have presented results still more satisfactory, but for the sacrifices imposed upon Russia by continual and sanguinary wars.

Another curious fact also merits attention, which is, that the number of children born during these thirty years is nearly equal to that of all the existing population according to the last census.

It would, on many accounts, be extremely interesting to compare the results given by these inquiries, made in Russia, with those obtained in other countries ; the more so, as the theories of learned political economists, relatively to the general laws of the increase of population, are based upon observations made exclusively in countries which form the centre of Europe ; but the real value of these hypotheses cannot be duly ascertained, until an examination be made as to the degree of confirmation or refutation they receive from the results of investigations made in other regions.

All who have written upon this subject have proved by extensive tables, that the number of male children which have come into the world exceeds that of girls. Another assertion of these authors is, that a greater mortality among boys under fourteen years

of age re-establishes a certain equality between the two sexes, which appears to continue till the age of maturity, but that more women than men arrive at an advanced age, and that, in consequence of this comparatively greater longevity in females, the total number of women exceeds that of the men.

It appears, however, that the facts collected in Russia confirm only one part of this theory, so universally adopted. It is true that, in this eastern part of Europe, the number of male children is also greater than that of females. The difference is even here more considerable than in any other country. The official lists prove, that among children born, there are one hundred and nine boys to one hundred girls, whilst, in the rest of Europe, the number of the first exceeds that of the second in the proportion of one hundred and six to one hundred. We are not able to ascertain if a greater mortality prevails among male children under fourteen years of age, the individuals being classed, in the Russian lists, according to age; however, it is still true that, in general, the number of men who die annually, regularly exceeds that of women, although not in a proportion to counterbalance the difference existing between the number of children of either sex, the comparative mortality being in the proportion of one hundred and five to one hundred women only.

From the above data, it must be concluded, that Russia forms an exception to the general rule, and that in this country (Russia) men form the greater proportion of the population. We cannot, however, decide with certainty if this be so or not, it not having yet been possible to take the census of the female population in the southern provinces with all the accuracy desirable.

We think we cannot better complete the above general view we have given of the population of Russia, than by adding the following table of each government, with the proportion existing between the extent of the soil and the population.

Numbers.		Inhabitants.	Sq. Miles.	Inhabitants for each sq. mile.
1 Archangel	- -	240,896	- 15,212	- 15
2 Astrakan	- -	103,280	- 4,072	- 25
3 Vilna	- -	1,315,781	- 1,162	- 1,132
4 Vibetsk	- -	702,266	- 778	- 825
5 Vladinir	- -	1,127,471	- 831	- 1,356
6 Vologda	- -	732,228	- 6,880	- 106
7 Volhynia	- -	1,314,117	- 1,073	- 1,224
8 Voroneje	- -	1,492,223	- 1,354	- 1,102
9 Viatka	- -	1,504,097	- 2,497	- 626
10 Grodno	- -	761,880	- 570	- 1,336
11 Catherinoslaff	- -	774,768	- 1,186	- 653
12 Casan	- -	1,309,432	- 1,104	- 1,186
13 Kalonga	- -	917,537	- 541	- 1,691
14 Kieff	- -	1,459,782	- 798	- 1,829

Numbers.	Inhabitants.	Sq. miles.	Inhabitants for each sq. mile.
15 Kostroma - -	972,102	1,438	670
16 Courland - -	503,010	475	1,058
17 Koursk - -	1,303,022	794	2,892
18 Livonia - -	740,089	826	895
19 Muisk - -	955,714	1,983	481
20 Mohileff - -	802,108	824	973
21 Moscow - -	1,240,283	550	2,255
22 Nijny-Novgorod -	1,076,363	878	1,225
23 Novgorod - -	735,170	2,070	355
24 Olonetz - -	236,670	2,354	104
25 Orenbourg - -	1,595,843	6,535	244
26 Orel - -	1,342,912	755	1,778
27 Penza - -	988,179	674	1,466
28 Perm - -	1,488,800	2,720	547
29 Podolia - -	1,548,155	576	2,687
30 Poltava - -	1,621,583	1,062	1,526
31 Pskoff - -	693,727	1,045	663
32 Riazan - -	1,211,223	707	1,713
33 St. Petersburg -	509,004	710	716
34 Saratoff - -	1,543,477	3,473	444
35 Simbersk - -	1,198,576	1,141	1,050
36 Smolensk - -	1,031,466	954	1,077
37 Taurida - -	543,020	2,040	266
38 Tambroff - -	1,580,259	1,152	1,371
39 Iver - -	1,297,942	1,122	1,156
40 Toula - -	1,074,687	529	2,031
41 Kharkoff - -	1,171,456	845	1,386
42 Kherson - -	607,949	1,099	553
43 Tchernigoff - -	1,312,592	898	1,460
44 Esthonia - -	280,612	315	890

Numbers.	Inhabitants.	Sq. Miles.	Inhabitants for each sq. mile.
45 Yaroslaff - -	930,180	- 897	- 1,152
46 Province of Belotok -	261,014	- 162	- 1,610
47 Province of Caucasus	208,944	- 1,803	{ - 132 - 101
111,538 -			
Province of Black Sea			
97,406 -			
48 Country of the Cos- sacks of the Don }	527,472	- 5,088	- 103
49 Bessarabia - - -	<u>503,666</u>	<u>- 794</u>	<u>- 634</u>
Total for Russia in Europe	47,592,427	- 87,257	
50 Jénesei - - -	193,486	- 58,371	- 3
51 Irkoutsh - - -	505,118	- 20,121	- 25
52 Tobolsk - - -	662,650	- 18,307	- 36
53 Tomsk - - -	394,136	-	-
54 Province of Onisk -	<u>72,545</u>	<u>- 802</u>	<u>- 90</u>
Total for the Asiatic Pro- vinces - - }	<u>1,827,935</u>	<u>-</u>	<u>-</u>

To the above must be added Georgia, respecting whose population we are yet without authentic information,—and the Grand Duchy of Finland, which is not included in this census.

STATE AND PROGRESS
OF THE
TRADE AND INTERNAL COMMERCE
OF RUSSIA IN 1835.

THE deficient harvests of preceding years could not but have a prejudicial effect upon commerce in general. The reaction, however, was but temporary, not even preventing Russian capitalists from enlarging their still existing commercial establishments, or from forming new ones. As a proof, the number of manufacturing concerns at present in activity throughout the empire is 6,045, 381 of which are new ones. The number of workmen is 279,673, being an increase of 5,704, without reckoning those employed in mines, furnaces, forges, &c.

Thirty-five applications for patents for new inventions connected with manufactures have been made, and of these eleven have been granted.

The greatest encouragement has been held out to persons engaging in new commercial enterprises. By an ukase dated 1827, such parties are relieved from certain taxes imposed upon them as members of one of the three city guilds, and in 1835 the land-tax and municipal imposts were also remitted in their favour.

The schools intended for the instruction of operatives promise the happiest results. That which is called the Technological School, having for its object the forming a body of instructors, reckons two hundred and twenty-six pupils.

The financial agents of Russia residing at Paris, Vienna, and Berlin, as well as the consuls at the chief commercial towns of Europe, have, on their part, greatly contributed to the progress and improvement of the national industry, by communicating to Russian manufacturers every information respecting new inventions made in foreign countries, forwarding to them patterns of new manufactures, models of machines, &c., and by engaging for them such workmen as they may be in need of.

The reports of M. Meyendorff, and of another gentleman commissioned with him to investigate the condition, progress, and future prospects of trade and manufactures throughout the empire, have been highly satisfactory.

The punctuality with which, in 1835, the manufac-

turers executed their contracts for supplying cloth for the army and navy, and the facility with which similar engagements have been entered into for the year 1836, is another proof of the prosperous state of Russian manufactures. Exports of the same article, to the amount of 3,181,663 roubles, have been made to Poland.

Fresh evidences of the great improvement in the internal trade are furnished by the fact, that the number of persons engaged in commercial affairs is rapidly increasing, and that every year many acquire the means of passing from the inferior to the upper guilds. The following table will make this clear.

			More than in 1834.
In 1835 the merchants of the first guild were	695	-	50
second	1,547	-	56
third	30,099	-	1,147
Peasants having permission to trade	4,992	-	388
Clerks	7976	-	831

The state of the different commercial and trading companies is equally gratifying, and, in every part of this vast empire, capitalists are employing their resources in new and useful enterprises. The American Company, the oldest and most important of all, continues its land and sea expeditions with great success, while its communications with the tribes inhabiting

the interior of North America are daily becoming more frequent. The Russian colonies established upon these uncultivated shores have been regularly supplied with provisions and other articles they stood in need of, and the chase has been so successful in the course of the year, that furs to the amount of 2,150,000 roubles have been exported, partly to Europe, and partly to Kiahkta, there to be bartered for Chinese produce. The stock of the company is now double its original value,—a convincing proof of the present profitable state of its trade, and of its flattering prospects for the future.

The Company of Artificial Mineral Waters at Moscow has been so prosperous, that the dividend for 1835 has been 200 roubles on each share. A similar company formed at St. Petersburg having been less successful, his Majesty the Emperor has been pleased to afford it pecuniary assistance, in order that so useful an establishment might be preserved.

In consequence of the Steam Boat Company between Lubeck and St. Petersburg having launched a third vessel, its privilege has been prolonged for four years. Another association, formed in 1835, has established a rapid communication between the different Russian ports of the Baltic. Two new Marine Insurance Companies have been formed at Odessa.

Seven other companies have been established in the course of the year ; three for the spinning of cotton, at St. Petersburg, Moscow, and Kalonga ; another for the manufacture of plated goods ; two for the improvement of sheep-folds in the southern provinces, and the seventh for the manufacture of calico at Tsareosk.

Unremitting have been the labours to complete in all its parts the system of internal communication. The works upon the river Seyn will be completed in the course of a few years ; and this river, which is now navigable for an extent of two hundred wersts, will then become so from its very source. Steam-boats have been established upon the Dnieper and the Berezina, for the towing of laden barges, and for the convenience of passengers and goods.

In consequence of the increased importance of the Black Sea, the government has taken every means to encourage all undertakings connected with its trade. Money has been advanced from time to time, upon due securities, to such as applied for it. To the town of Ismail, in particular, 15,000 roubles have been lent for ten years without interest,—a favour which will enable the extensive dockyards for the merchant vessels, there in progress, to be quickly finished.

Passing from commercial establishments to those instituted for the instruction of youths destined to the

service of the public, we have great pleasure in announcing that the pupils of the School of Commercial Navigation at St. Petersburg made, in the course of 1831, as well as in preceding years, an experimental voyage. After the examination in the month of May, nine pupils, six of whom were educated at the expense of the government, were appointed as pilots or pilots' mates, and are now employed in that capacity in the Baltic, the Black and the Caspian Seas.

RUSSIAN IMPORTS AND EXPORTS IN 1836.

THE total value of *imported goods* is 180,913,929 roubles 87 copecks. The principal articles so exported were spun cottons, to the amount of 48,418,476 roubles 55 copecks ; raw cottons, 5,262,880 roubles ; sugar, unrefined, 37,343,543 roubles 53 copecks ; coffee, 4,316,995 roubles ; silks, 5,420,632 roubles 40 copecks ; woollen goods, 6,174,867 roubles 75 copecks ; cotton stuffs, 3,344,433 roubles 75 copecks ; hempen stuffs, 520,083 roubles ; wines, 8,879,765 roubles 46 copecks ; gold and silver, 2,948,450 roubles 46 copecks, &c.

The total value of *exported goods* is 129,601,862 roubles 88 copecks. The principal articles were tallows to the amount of 40,732,358 roubles 87 copecks ; hemp, 19,221,328 roubles 90 copecks ; flax, 6,291,808 roubles 30 copecks ; copper, 9,364,065

roubles 30 copecks; iron, 6,869,329 roubles 39 copecks; cloths, 7,521,786 roubles; bristles, 5,316,052 roubles 75 copecks; raw hides, 2,618,099 roubles 50 copecks; potassium, 2,134,660 roubles 20 copecks.

In 1835 the *importations* amounted to 165,686,702 roubles 96 copecks; and the *exportations* to 107,033,563 roubles 77 copecks. Compared with this year, there was consequently in 1836 an increase of 15,227,226 roubles 91 copecks in the value of the former, and of 22,568,299 roubles 11 copecks in that of the latter.

Whilst the navigation was open, there arrived 1,105 vessels, gauging altogether 108,613½ casks; and there departed 1,182, gauging 116,327½ casks. Of the former vessels, 823 were with cargoes, of which 123 were of coal: two vessels remained to winter at St. Petersburg.

The receipts of the Custom-house were, in 1836, 48,968,790 roubles 74 copecks; 1835, 46,763,444 roubles 34 copecks;—increase in 1836, 2,205,346 roubles 40 copecks.

A CONCISE ACCOUNT OF THE SYSTEM, PROGRESS, AND
PRESENT STATE OF
PUBLIC INSTRUCTION IN RUSSIA.

(Extracted from the official documents compiled by M. A. Krusenstern, Chamberlain of his Majesty the Emperor. 1 Vol. 8vo. Warsaw, 1837.)

THE majority of foreign authors who in modern times have written upon the civilisation of Russia, and more particularly upon the actual state of public instruction in this empire, have necessarily, from the total absence of all precise data upon these subjects, fallen into grave and serious errors.

These desiderata are, however, now for the first time supplied by the work of M. Krusenstern, which contains, 1st, An account of the advance and progress of public instruction in Russia, from the time of Peter the Great to the present day. 2nd, A full description of the establishments of education now existing,

as well those which are under the superintendence of the minister of public instruction, as the military institutions, ecclesiastical schools, and those seminaries in which particular branches of education are exclusively taught. 3rd, A general view of private instruction.

So early as the eleventh century, public schools were founded at Novgorod, Kieff, and Smolensko, by an enlightened monarch, the Grand Duke Yaroslaff, the legislator of his people, the embellisher of his capital, and, like the English Alfred, the translator of the Holy Scriptures into his vernacular tongue.

The invasion of the Tartars and various civil wars rendered the first essay abortive; the schools were abandoned, and for several ages the monasteries alone afforded the Russian youth a few scanty means of instruction. At a later period the Grand Dukes of Moscow, having by their authority put a stop to internal discord, the government again endeavoured to introduce the elements of civilisation, and the first printing establishment was opened at Moscow in 1563. Many learned foreigners were invited to the court, and the Tsar Boris Godounoff was only prevented from founding a university and a certain number of public schools by the troubles caused by the appearance of the impostor Demetrius. It is, however, to the princes of the illustrious house of

Romanoff that Russia is chiefly indebted for the benefits of civilisation ; the Tsar Theodore Alexievitch more particularly distinguished himself in diffusing knowledge throughout his dominions, and it is to him that Russia owes the most ancient of her learned institutions, the Ecclesiastical Academy of Moscow, founded in 1769.

At length Peter the Great appeared. This monarch, convinced that public instruction was the most efficient instrument for working out the regeneration of his country, founded numerous scientific establishments, and his successors, following the route he traced out for them, have seen their efforts crowned with success. We shall distinguish three separate epochs in this advance of civilisation, each one being remarkable for its own peculiar character.

During the first epocha, which comprehends the time from the accession of Peter I. to that of Catherine II., the efforts of government were restricted to organising, in the capital and provinces, new schools in proportion as they became wanted, without, however, adopting any general plan, or even submitting the direction of so many establishments to the superintendence of any central authority. Latin and Greek schools were founded, in the year 1700, in different towns of the empire ; shortly afterwards a naval school, and one of engineering, were founded

at St. Petersburg; mathematical and navigation schools at Moscow, and in several chief towns of provinces; ecclesiastical schools in the bishoprics; and lastly, elementary schools throughout the country. The good effects of these establishments soon began to appear,—the opening of the St. Petersburg Academy of Sciences taking place immediately after the decease of Peter the Great. In 1731 the Empress Anne established the first corps of cadets at St. Petersburg, and the Empress Elizabeth founded the University of Moscow, the Academy of the Fine Arts, and a great number of schools.

The second epocha commences with the accession of Catherine II., and ends with that of the Emperor Alexander. The coercive measures necessary during the first epocha were now useless,—so much so, that at the commencement of Catherine's reign a private individual set the patriotic example of contributing largely to the support of a public school. Under the fostering care of the Empress Catherine, public instruction received still greater development; and as all preceding efforts had been limited to the imparting a greater or less degree of learning and knowledge, the Empress judged it necessary to form establishments in which the morals of the rising generation might at the same time be attended to. With this view, she ordered boarding-schools for both sexes to be

established in all the different governments in the empire. A still more important measure, and one which greatly contributed to impart to this second epocha its peculiar feature, was the organisation of a central authority, entrusted with the care of disseminating education throughout the empire, and of giving to so many different establishments one uniform tendency to a common end. A special commission having been appointed for this purpose, all the schools, excepting only the University of Moscow and the ecclesiastical seminaries, were placed under its direction; divided into *upper* and *lower* schools, they were reorganised upon one general plan, and subjected to uniform regulations. The Emperor Alexander having, upon ascending the throne, declared it to be his conviction that public instruction was the first element of the prosperity of states, substituted for the special commission the minister of public instruction, the powers of which functionary were much more extensive. Increased activity now animated every branch of this important department, and the most brilliant results rewarded their labours. The foundation of the universities of Dorpat, Casan, Kharkoff, and of the Teachers' Institution at St. Petersburg, (which latter has since been converted into a university,) took place during the years 1802—1804; that of Vilna

received at the same time a new organisation; and these universities, entrusted with the care of superintending all the establishments of instruction in the districts of which they were the centre, formed, as it were, so many nuclei of knowledge and learning. The government also took upon itself the formation of gymnasia and district and parochial schools, being seconded by the generosity of individuals who vied with each other in forwarding the beneficent views of their august sovereign.

The third epocha commences with the accession of the reigning monarch. His Majesty's first care was the reorganisation of the system of public instruction, with the view of rendering it purely national. The peculiar characteristic of this epocha is the establishment of a great number of *special* schools, destined to bring up the pupils for some distinct pursuit or profession, by giving them an education less general, but more solid. The number of schools newly organised from the year 1826 to 1836, amounts to 691.

I.—MINISTRY OF PUBLIC INSTRUCTION.

As at present organised, this department comprehends the following branches :

1. Education in the public schools.
2. Education in private institutions.
3. Domestic education.
4. Establishments destined for forming professors and

masters. 5. The Academy of Science, the Russian Academy, the other learned societies, the censorship, public libraries, museums, and collections of every description.

A special commission—having for its president the minister of public instruction, and entrusted with the task of examining the rules and course of studies adopted in all the schools throughout the empire, and of drawing up new statutes applicable to all the regulations proposed in the report which the said board submitted for his Majesty's approval—commenced its duties in the year 1828 throughout the whole empire, excepting only the departments of Dorpat and Vilna, which are subjected to special regulations.

The former division of schools into parochial schools, district schools, and gymnasia, has been preserved. The special object of the parochial schools is to diffuse elementary knowledge among all the lower classes of the population, whilst the district schools are principally intended to afford the children of mechanics and tradesmen the means of acquiring an education fitted to their wants and their condition in society, and that the pupils of the gymnasia may receive a learned education calculated to qualify them for continuing their studies at the universities. The following is a list of the schools, and of their comparative state at different periods.

Commencing with the universities, we find that there were at the University of—

	1808.		1824.		1835.	
	Professors and Masters.	Pupils.	Professors and Masters.	Pupils.	Professors and Masters.	Pupils.
St. Petersburg	-	-	38	51	64	285
Moscow - -	49	135	59	820	120	419
Kharkoff - -	27	82	43	337	56	342
Casan - - -	15	40	34	118	89	252
Dorpat - - -	37	193	39	365	68	567
Kieff - - -	-	-	-	-	61	120
Total	126	450	213	1,691	458	1,985

The Upper Teachers' Institution at St. Petersburg is an establishment which was founded in 1829; its object is the preparation of tutors for the gymnasia and lyceums of the empire; it is next after the universities. The number of pupils there at present is 146.

In the total, the number of schools dependent upon the minister of public instruction, as also that of the students, has increased in the following proportion :
There were in

	Schools.		Students.	
1804 - -	499	- -	33,481	
1824 - -	1,411	- -	69,629	
1835 - -	1,681	- -	85,707	

The importance of such an increase need only to be observed to be appreciated.

It is, moreover, the duty of the minister of public instruction to overlook education in private and boarding schools, as well as domestic education, no person being allowed to follow the profession of a tutor without at least having undergone an examination at one of the universities.

The annual budget of the ministry amounted to 7,450,000 roubles.

II.—MILITARY SCHOOLS.

The numerous establishments of this class may be arranged under three heads, viz. 1. Schools placed under the direction of his Imperial Highness the Grand Duke Michael. 2. Schools under the direction of the Navy Board. 3. Military schools especially reserved for soldiers' children, and which are under the control of the minister of war.

A.—Military schools under the direction of his Imperial Highness the Grand Duke Michael.

It was at the recommendation of the celebrated Count Munnich that the Empress Anne decreed, in 1731, the establishment of a military school for 200 cadets of noble family. This institution, the first of its kind in Russia, and which still exists under the name of First Corps of Cadets, afterwards received that of the Academy of Chevaliers: the sums an-

nually allowed for its maintenance amounted to 34,000 roubles. The Empress Catherine increased the number of pupils to 8,000, having moreover founded, in 1763, a second corps of cadets for 132 pupils, destined to serve in the artillery and engineer departments. Since 1816 the number of pupils has increased to 3,515, and the results, since the above date, under the reign of his Majesty the Emperor Nicholas, have been still more satisfactory. Until his Majesty's accession, there were scarcely any military schools, except in the two capitals; subsequently to that event several have been organised in the provinces, and all these establishments, subjected to uniform regulations, are henceforth arranged under three heads. The schools which may be called preparatory, such as the sections for children from seven to ten years of age, form the first; the corps of pages, the different corps of cadets in the two capitals, &c., belong to the second; the third is composed of special schools, that is, of the Engineers' School, the Artillery School, and the Military Academy. In 1836 the number of pupils in the establishment under the two first heads amounted to 5,675, and their annual budget to 3,755,001 roubles: 680 pupils more continued their studies in the schools under the third head, and the expense of their maintenance, &c., amounted annually to about 500,000 roubles. By

adding the 2,400 pupils of the six corps of provincial cadets, the organisation of which is not yet completed, and an annual sum of 2,000,000 roubles allowed for their support, it will be seen that in the establishments under the control of his Imperial Highness the Grand Duke Michael, the number of pupils amounts to 8,733, and their annual budget to 6,255,000 roubles.

B. Schools under the superintendence of the Navy Board.

The Marine Cadet Corps, one of the first creations of Peter the Great, is the most remarkable of the establishments of this description. It was first called *The Navigation School*; in 1715 it was changed into *The Marine Academy*; in 1752 it received its present appellation, and in 1826 a new organisation. The number of cadets is fixed at 600, and an annual sum of 345,000 roubles was allowed for their maintenance. In 1827 a new institution of a superior order was combined with the Marine Cadet Corps. This body was composed of 25 young officers who devoted themselves for three years to the study of transcendental mathematics, natural philosophy, chemistry, &c., and who, upon quitting the establishment, obtained the promotion of one grade.

The *demi-bataillon* of pilots at Cronstadt is intended

to furnish the fleet with skilful pilots ; the number of pupils is 300. Similar battalions of instruction of marine mechanics have been formed at St. Petersburg, Cronstadt, Nicolaieff, and Sebastopol.

The establishments which we have just enumerated reckon together 2,224 pupils, and their annual budget amounts to 632,194 roubles.

C. Schools for the children of soldiers, under the direction of the Minister of War.

The first schools of this kind were founded by the Emperor Paul, and at the commencement of this century the number of pupils was 16,400, and their annual budget 520,076 roubles. In 1826 a new organisation of this establishment took place, the pupils being formed into battalions, demi-battalions, brigades, and regiments. The number of pupils now amounts to 169,024, and the expenses of their maintenance to 1,800,000.

The number of pupils in all the military schools of every class amounts to 179,981, 400 of whom only pay a small annual sum ; all the others are educated at the sole expense of the state. The annual budget of these establishments forms a total of 8,687,194 roubles. A comparison of these accounts with those of the military schools in the time of the Empress Anne will suffice to give a correct idea of the immense pro-

gress which Russia has made in the short space of one century.

III.—ECCLESIASTICAL SCHOOLS.

The numerous establishments of this nature which at present exist in Russia are divided into two heads, as far as regards their management. The first comprehends the schools of the Greek church, under the control of the holy synod, and directed by a special commission; the second, the ecclesiastical schools belonging to other forms of worship, which schools are under the superintendence of the minister of the interior.

A. Ecclesiastical Schools of the Orthodox Greek Church.

The Russian clergy, whom history represents as being always in advance of the rest of the nation, has rendered immense services to the country, by exercising at all times a salutary influence over the progress of civilisation; the monasteries having been for a long period of time the only schools in the country.

Peter I. being desirous of giving more uniformity and extent to the means of instruction which the clergy possessed, applied one twentieth part of the revenues of monasteries, and one thirtieth of those of churches, to the maintenance of schools established at

that time in the houses of archbishops and bishops, as well as in the principal convents. A plan of studies, drawn up by the Emperor's command, has served ever since as a regular canon for all these establishments. In 1764, the maintenance of the ecclesiastical schools, the number of which was 28, containing 6,000 pupils, was charged upon the budget of the state, and an annual sum of 38,000 roubles was appropriated to that object.

In the course of the first twenty years of the reign of Catherine II., the number of pupils had gradually increased to 12,000, and their annual budget, augmenting in proportion, amounted in 1784 to 77,000 roubles. Upon the accession of Alexander, these establishments underwent several modifications.

By virtue of the ordinance of 1814, all these schools are divided into three departments, viz. those of St. Petersburg, Moscow, and Kieff. Each district has a superior school, called the *Ecclesiastical Academy*, and having under its superintendence a certain number of middle-schools or seminaries, for the most part established in the chief provincial towns, and of inferior schools, divided into district and parochial ones. Exclusively reserved for the children of the clergy, these establishments have the double object of preparing for the ecclesiastical profession those of the pupils who aspire to fulfil one day its venerable functions, and of

giving a suitable education to those among them who, on the contrary, prefer the civil service, or the course of university studies. The pupils pass from the parochial schools into those of the district, and afterwards into the seminaries: the course of studies in these latter lasts for six years, of which two are devoted to literature; two to natural philosophy, including the mathematics; and lastly, two to theology and church history.

The ecclesiastical academies, which at present reckon 317 pupils, are simultaneously schools and scientific bodies, they being intended to form young persons for the superior offices of the church, and at the same time to extend the limits of theological knowledge by continued researches.

The following tables will show the comparative state of these establishments at different periods.

		In 1808.	1824.	1836.
Schools	" -	83	344	384
Masters	- -	444	1,022	—
Pupils	- -	30,167	45,851	58,586

The sums allowed for their support amount at present to about 2,500,000 roubles.

B. Ecclesiastical Schools belonging to other kinds of Worship.

According to the report of the minister of the interior, their actual state is as follows:—

a. Schools of the pure Greek Church,	23 with 1,274 pupils
b. Schools of the Roman Catholic Church,	275 with 7,073 pupils
c. Schools of the Catholic-Armenian Church,	5 with 137 pupils
d. Schools of the Armenian-Gregorian Church,	14 with 319 pupils
	<hr/>
	347 8,803

The ecclesiastical academy of Vilna, which reckons 90 pupils, is included in the item of Roman Catholic schools, of all which the annual expense of maintenance amounts to 500,000 roubles.

Altogether the ecclesiastical schools, as well those of the orthodox Greek church as of others, present a total of 701 establishments—67,024 pupils, of whom 41,586 pay their own expenses; 10,517 receive pecuniary assistance from government, while 15,408 are educated wholly at the expense of the state.

IV.—SPECIAL AND OTHER SCHOOLS.

The numerous establishments comprised under these denominations are classified according to the different ministers who have the superintendence over them.

1. *Schools under the superintendence of the Minister of Finance.*

A. Mining Schools.

Peter the Great, justly appreciating the value of the mineral riches of Siberia, had already founded a few schools, having for their object the preparation of young persons for directing the working of the mines.

These establishments were, however, only elementary, and it was not until under the reign of Catherine II., in 1773, that the *School of Mining*, now in existence, was founded at St. Petersburg. All these establishments are at present arranged under three heads, viz. primary schools, organised in the neighbourhood of mines and mining establishments, and intended for the elementary instruction of the children of miners and other workmen : middle schools, in which the pupils of the inferior schools who have distinguished themselves enter upon a course of studies calculated to qualify them for secondary employments in the mining boards : and lastly, the superior schools, such as the Institution for Mining Engineers, the Technological Mining School at St. Petersburg, the Section of Medallists at the mint at St. Petersburg, and the Technological School lately formed at Barnaoul.

In the inferior schools, which are 56 in number, there are 189 masters and 4,034 pupils ; the middle schools of Nertchinsk and Barnaoul reckon 242 students. The total number of pupils in the mining schools of every class is 4,613, and the amount annually allowed by the government for their support is 647,911 roubles.

Besides the schools founded and supported by the state, several individuals, proprietors of mines, have also formed similar establishments. That of the

Countess Strogonoff reckons already 44 teachers and 451 pupils, and that founded in 1806 at Nijny-Tahil has 150 pupils. Calculating in round numbers the pupils belonging to these special schools at 1000, the total number of pupils will by this addition amount to 5,613.

B. Various Schools under the superintendence of the Minister of Finance.

These are 10 in number :—the Forest Institute and the Practical Technological Institute at St. Petersburg ; the two marine-merchant schools at St. Petersburg and Kherson ; the Academy of Commerce at Moscow ; the Agricultural School at Gorygoretsk ; the School of Land-surveyors and the School of Design at Tchernigoff ; and the two schools for *Forest Sciences* at Metau and Lissinsk near Tsarkoésélo, the former established in 1834 and the latter in 1835 : 608 pupils attend these schools, the expenses for maintaining which amount to 384,280 roubles. The total number of schools placed under the direction of this minister amounts to 72, having 6,221 pupils, the annual budget of which is 1,032,191 roubles.

2.—Schools under the superintendence of the Minister of the Interior.

These schools may be divided into such as are

placed under the immediate direction of the minister, and such as are regulated by the Boards of Public Charitable Institutions.

Amongst the first class, those of medicine are the most important. Towards the close of the eighteenth century, the schools of assistant surgeons, founded by Peter the Great, at the military hospitals of the two capitals and at Cronstadt, were the only establishments of the kind in Russia. In 1799, the Emperor Paul abolished these schools, replacing them by the two Academies of Medicine at St. Petersburg and Moscow. These were united in 1808, and formed into one institution, named the *Medico-Chirurgical Academy*. A new school of the same description was founded in 1832 at Vilna. The number of pupils in all these establishments had increased from the end of the year 1835 to 2,148, the expenses amounting annually to 875,442 roubles. The other schools placed under the direction of this minister are that of pharmacy at St. Petersburg, the subsidiary surgical schools, and five others connected with agricultural and horticultural pursuits.

The Boards of Public Charitable Institutions originated in 1775. Each of these boards was endowed, at its creation, with 15,000 roubles, forming a total of 675,000. In 1808 this capital had increased to the sum of 8,878,000 roubles; in 1820, to 36,416,200

roubles; in 1830, to 89,938,950 roubles; and in 1836, to 122,851,387 roubles.

The schools superintended and maintained at the expense of these boards are those for the sons of inferior clerks in public offices, orphan hospitals, and schools for poor children. These are sixteen in number, with 1,612 pupils; annual expenses, 105,415 roubles. Under the direction of the same board, are also twenty-four houses of education, with about 4,300 pupils; besides which, a sum of about 129,000 roubles is annually expended for the education of 4,124 poor children, who are boarded in the houses of private individuals, or in the villages.

The total number of hospitals and schools under these boards is about sixty; more than 10,540 orphans or poor children are brought up in them, the expenses being about 600,000 roubles.

The total number of schools placed under the control of the Minister of the Interior is 107; the number of pupils is 13,340, and their annual budget amounts to 1,962,714 roubles.

3.—*Schools under the superintendence of the Minister of the Emperor's Household.*

Academy of the Fine Arts.—This establishment, founded in 1748, under the reign of Elizabeth, received at first 30 pupils: in 1764 it was placed upon

a larger scale, 60,000 roubles being then annually assigned for its support. In 1802, the number of pupils was increased to 300, with an annual budget of 146,000 roubles. In 1830, the number of pupils supported at the government's expense was fixed at 50; 100 paid for their education, and from 150 to 200 were out-door scholars, with permission to attend the classes. The annual budget of the establishment has been increased to 221,825 roubles.

The *School of Architecture* at Moscow, the *Theatrical School* at St. Petersburg, and the *School of the Court Choristers*, are also placed under the directions of this minister.

The four establishments together reckon 345 pupils, with an annual budget of 391,825 roubles.

4.—*Schools under the superintendence of the Minister of Appanages.*

The numerous schools lately organised in the appanage lands are a new proof of the unremitting care of the government to propagate useful knowledge throughout the agricultural classes. In 1832 an agricultural school was founded for 250 pupils, in addition to which there have been established, since 1828, sixty-five elementary village schools and two normal ones,—not less than 1,070 pupils being thus lodged,

clothed, and fed at the expense of this department of the state.

5.—*Schools under the superintendence of the Commission of Public Roads.*

These are three in number.—*The Institution of Engineers of Public Roads, the School of Civil Engineers, School of the Managers of Public Roads.* The first of these was founded in 1810, and, after being modified in 1824, was remodelled in 1831. The number of pupils is 265, of whom 160 are educated at the charge of government, and 105 at their own. The annual expense of this establishment is 192,000 roubles. The second was founded in 1832, and the total number of pupils is 100. The third was established in 1826; the number of pupils is 300, the annual expense being about 189,545 roubles.

Total of the three schools, 665 pupils; expenses 381,545 roubles annually.

6.—*Schools under the superintendence of the Minister of the Interior.*

a. *School of Jurisprudence at St. Petersburg.*—This institution was founded in 1835 by the enlightened patriotism of his Highness Prince Peter of Oldenburgh, and has for its express object the education of those sons of the nobility who are intended for

filling judicial offices. The number of pupils is fixed at 150, and a sum of 156,654 roubles is annually allowed for the support of the establishment.

b. Constantine's Land Surveying Institute at Moscow.—The annual expense of this establishment, which was reorganised in 1836, is 117,000 roubles ; the number of pupils is 200, fifty of whom pay their own expenses.

7.—*School under the superintendence of the Minister for Foreign Affairs.*

The Oriental Institute of the Minister for Foreign Affairs.—This establishment receives six pupils, whom it qualifies, by the study of the Oriental languages, for acting as diplomatic interpreters.

8.—*Institutes of the Empress Maria, placed under the protection of her Majesty, the reigning Empress.*

In this number are comprised the two Foundling Hospitals ; that of Moscow, founded in 1763, and that of St. Petersburg, founded in 1770. Notwithstanding the large sums appropriated to them, they were by no means in a flourishing condition until the Empress Maria took them under her special protection. The hospital at St. Petersburg is divided into two sections, one for girls, which is situated in the city itself, the other for boys, at Gatchina ; the number of pupils is 19,093 ; that at Moscow reckons 30,811 ;

the two together, 49,904, who are either at the hospitals themselves, apprenticed out to different trades, or, lastly, at the universities and superior schools, where they continue their studies at the expense of the establishment which fostered their infancy. The government annually assists these institutions with about 3,000,000 roubles.

Several other establishments of education are partly maintained at the expense of the above institutions. These are *the Schools of Commerce at St. Petersburg, the School of Commerce at Moscow, Alexander's Orphan Institution at Moscow, the Deaf and Dumb Institution at St. Petersburg, and the Hospital for the Blind at Gatchina*—establishments whose inmates amount to 775, and which are annually assisted by government with 525,296 roubles.

To the above institutions must be added eleven other establishments for the education of young ladies, the number of pupils being 2,264, with an annual allowance of 1,220,192 roubles for their maintenance.

9.—*Institutions placed under the immediate superintendence of her Majesty the reigning Empress.*

The Patriotic Institution.—On the 1st of January, 1836, the number of pupils was 245, and the balance in hand 644,211 roubles.

House of Industry.—On the 1st of January, 1836,

the number of pupils was 72, and of those who paid their own expenses 128. During the course of the year there had been 26 ill, but only one death. The balance in hand was 638,848 roubles.

Poltowa Institution for Noble Young Ladies.—Her Majesty condescended to visit this institution in 1835, and to honour it with her approbation. On the 1st of January, 1836, the establishment reckoned on 110 pupils, and 55 who paid their own expenses. The resources of the institution have been increased by a decree of the Emperor, who has also presented it with 200 iron beds. On the 1st of January, the capital in hand was 280,560 roubles.

Moscow House of Industry.—On the 1st of January, 1836, the number of pupils was 50 ; of those who pay their own expenses, 51 ; and 9 who only pay half—total 110. The balance in hand for 1836 was 443,805 roubles.

Christian Charity Society and House of Industry at Timbirsk.—On the 1st of January, 1836, the balance in hand of this society was 10,166 roubles. In the course of the year assistance has been afforded to fifty families, eight of whom enjoy pecuniary assistance to a stated amount. By order of her Majesty, the capital of this society has been united to that of the House of Industry ; making together, on the 1st of

January, 1836, 84,422 roubles 21 copecks. The number of pupils 20.

The Cronstadt Orphan Hospital.—On the 1st of January, 1836, the number of pupils was 30, and of those paying their own expenses 3; the balance in hand 28,647 roubles.

Kieff Benevolent Society and Countess Levaschoff's School.—This society has 114 effective and 43 honorary members. Pecuniary assistance to a stated amount has been again granted to eight families, while from twenty-one others, such assistance has, for various reasons, been withdrawn. The number of families receiving pecuniary aid from the society is 186. The society has found employ for 69 other families; 14 poor girls have been educated at its expense; 10 female orphans have been placed in an institution organised for that purpose, and four boys have been apprenticed to different trades. The number of families assisted in one way or another is 297. The balance in hand on the 1st of January, 1836, was 16,562 roubles 30 copecks.

Alexandrina Institute for Noble Young Ladies, founded at Tamboff.—The committee entrusted with the organisation of this new institution are at present engaged in drawing up the regulations, which will be submitted to her Majesty. At a general meeting on the 15th of December, 1835, the nobility of the

government of Tamboff voted a fresh sum of 113,000 roubles for the construction of the necessary buildings; which sum, added to the former votes, makes a total of 339,000 roubles.

Demidoff House of Industry.—The sphere of activity of this establishment is daily enlarging. The number of persons received in it has increased from 17 to 52; in addition to which, from 16 to 75 persons, chiefly females, have daily applied for work. Total number of rations of food distributed, 22,649; money, 2,370 roubles 75 copecks.

In consequence of donations from individuals, amounting to 85,000 roubles, the establishment is enabled to found a school for poor children, at which also other pupils will be admitted upon payment of 150 roubles yearly. Balance in hand on the 1st of January, 1836, (exclusively of 25,092 roubles coming from the promised donations,) 313,888 roubles 50 copecks. The buildings belonging to the establishment may be valued at 240,000 roubles, and its tools, &c., at 40,000 roubles more.

Horticultural Amateur Society at Moscow.—The labours of this society, formed in 1835, and consisting of 70 members, are under the management of a council composed of twelve persons. A portion of the land has been placed at its disposition, besides 550 plants from the botanical garden. Her Majesty

besides 10,296 roubles for books, maps, and other objects necessary for instruction.

The Asiatic school was founded at Orusk in 1789, for the purpose of supplying interpreters to all the frontier line of Siberia. It was at first composed of 20 pupils for the Tartar language, five for the Mandjora and Mogul, with two masters. A sum of 531 roubles 35 copecks was assigned for its support. None were admissible but the children of Cossacks upon the Siberian line. At a later period the children of Mahometan *employés*, attached to the frontier service, were eligible. Since 1821 the government has increased the annual allowance, with an additional sum of 5,000 roubles, and has ordered that 6 of the 25 pupils should be sent to the Casan gymnasium, to perfect themselves in the Oriental languages: these pupils have each 600 roubles annually paid for them while at Casan, until qualified to enter the university.

AN

HISTORICAL SKETCH OF
THE CITY OF RIGA, ITS TRADE, &c.

TOWARDS the middle of the eleventh century some Bremen traders, on their way to Wisby, in the Isle of Gothland, which was then the centre of the Baltic trade, were driven by contrary winds upon a coast unknown to them. It was that of Livonia, then inhabited by tribes of Finlanders; many of these were tributaries of the Grand Dukes of Russia, whilst others, especially the inhabitants of the Isles of Oesel, subject only to native chiefs, had made themselves formidable as pirates.

No sooner was this discovery known in Germany, than a missionary, one father Meinhard, was despatched thither with the title of Bishop of Livonia; and the Pope having declared that the merit of a crusade upon these shores would equal one in Palestine, crowds of German knights hastened to defend

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the establishments of the missionaries, and to reduce to submission the pagan inhabitants. Albert, the third Livonian bishop, finding that, without trade and commerce, the conquests of the Germans in these regions would not only be valueless, but even insecure, and being consequently desirous of attracting a commercial population to the country, founded, about the year 1200, the city of Riga, upon the right bank of the Duna, which river would form its port.

In order to insure the prosperity of this new town, and to draw colonists thither, its founder granted it many privileges, amongst which were the right of choosing its own magistrates, and of coining money ; a considerable extent of territory was given it in perpetuity, with a promise of part of such conquests as should be made in the country. These advantages had so good an effect, that, in the thirteenth century, Riga entered the league of the Hanseatic towns ; and in the sixteenth, commerce had been productive of so much wealth, that the power and riches of its inhabitants became proverbial.

About this period some missionaries from the German universities having preached there the doctrine of Luthér, the Reformation was eagerly embraced, and the magistrates and citizens entirely shook off the archiepiscopal authority. In 1561 Riga became a free imperial town ; and twenty years later, in 1581,

it finally acknowledged the supremacy of the kings of Poland,—not, however, without having its privileges guaranteed to it.

Since this time its fortunes have been various ; and in 1621 the hero of the north, Gustavus Adolphus, besieged Riga in person. After a vigorous defence it surrendered upon terms, and the Polish standard was surmounted by that of Sweden.

From information which we possess respecting the trade of Riga at this epocha, it appears to have fallen off considerably from its ancient importance. We know, for instance, that the number of ships which entered its port did not exceed, in 1621, 161, of which 64 belonged to the city ; in 1623, 108, of which 56 belonged to the city ; in 1624, 152, of which 43 belonged to the city ; and as at this time vessels were of a very moderate tonnage, these numbers give no very great idea of its commerce.

After having suffered two dreadful conflagrations in 1667 and 1677, and been twice besieged in 1700 and 1709, it at length yielded to the Russian arms in 1710.

It is only since this time that Riga has really enjoyed all the advantages of its position,—it is only since then that it has become what it ought to be, the principal outlet for a great part of Russia and Lithuania. At the time of the accession of Catherine II.,

Riga already reckoned more than 20,000 souls; and the following details will serve to give an idea of the flourishing state of its commerce at this period.

The number of ships entered, amounted, in 1766, to 612; in 1768, to 541; in 1770, to 609; in 1771, to 752; in 1772, to 1019; in 1774 to 779; in 1775, to 849.

The value of imports and exports was

	Imports.			Exports.	
In 1766	1,211,914	silver roubles	2,266,193	silver roubles	
1771	1,179,274	- - - -	2,911,060	—	

The annual proceeds of the custom house duties varied between 520,000 and 560,000 silver roubles.

The following table exhibits the comparative increase and decrease of its commerce.

Year.	Ships entered.	With cargo.	In ballast	Tonnage.	Ships left.	With cargo.	In ballast.	Tonnage.	Value of Imports.	Value of Exports.
									Roubles.	Roubles.
1825	1,002	385	617	142,928	997	985	12	141,781	18,827,620	45,150,657
1830	1,241	411	830	172,000	1,246	1,232	14	172,796	13,747,489	41,126,200
1835	914	361	553	127,796	890	879	11	124,460	18,225,961	38,204,991
1836	1,102				1,127				15,093,675	47,725,684

The amount of custom-house duties has varied during this period between 8,000,000 and 8,500,000 roubles.

A comparison of the official documents of different periods will also show that the great increase of trade

since the reign of Catherine II. has not been made in the same proportion upon all articles. The trade in grain, for instance, has even lost some of its former importance; for, in 1774, the total of corn exported was 189,000 tchetverts; in 1825 it was only 57,003; and even in 1830, a year remarkable for commercial activity, it did not exceed 167,923 tchetverts. The hemp trade has maintained itself in nearly an equal state; the quantities exported being, in 1774, 666, 440 poods; in 1825, 680,222 poods; and in 1830, 660,704 poods. The increase has principally been upon three articles, viz. flax, linseed, and wood. In 1774, one of the most remarkable years for the flourishing state of commerce, Riga exported only 406,570 poods of flax; in 1825, 1,421,490, the value of which may be estimated at 21,322,350 roubles; and in 1836, to the amount of 23,829,920 roubles. With respect to the linseed trade, the annual exportation rose, from the year 1760 to 1780, to about 35,000 tchetverts; in 1825, 187,232 tchetverts were exported, valued at 3,950,595 roubles; in 1830, 259,989 tchetverts, value 6,499,725 roubles; and in 1836, to the amount of 8,731,763 roubles. The wood trade has also experienced a similar increase. In 1830, the exports amounted in value to 2,103,503 roubles; in 1835, to 2,893,921 roubles; and in 1836, to 3,583,763 roubles.

Riga, which at a time not very remote could not

boast of one manufactory, unless a few tan-pits be considered as such, now reckons 25, employing 1,397 workmen. Under the Empress Catherine its population scarcely reached 20,000 souls; in 1824 it was 31,908; in 1830, 49,321; and in 1835, 67,338, including a garrison of 10,000 men.

The increase of the city has kept pace with that of its population. In 1835 there were 842 houses, entirely built of stone; in the suburbs the number of wooden houses, which in 1824 was 2,655, amounted, in 1835, to 3,081. The number of churches in the city and its suburbs is 18, exclusive of five chapels. The formerly barren shores of the river are now embellished with gardens, of which there are not fewer than 2,044; while neat and even elegant country houses impart to the whole scene a character of increasing prosperity.

THE MINES IN FINLAND.

THE mineral riches found in the Oural and Altai mountains are not confined exclusively to those parts of the empire. Amongst several others, the mines of the Grand Duchy of Finland promise to be of great importance.

This vast country, situated under a rigorous climate, thinly inhabited and little cultivated, bristling with rocks, and intersected in every direction by lakes surrounded with forests of fir, abounds in mines of iron of two distinct kinds. The hills, of a comparatively recent formation, which rest upon the primitive rock, contain veins of an ore fit for the manufacture of wrought iron, while layers of a fusible ore are found buried at a small depth in marshes and along the borders of the lakes.

For a long time the mines of the first description were neglected. Forges and furnaces, it is true, were

known in Finland at a very remote period, but the cast iron necessary for the fabrication of wrought iron was procured from Sweden,—it never having occurred to any one to take advantage of the mines which chance had discovered. Subsequently, however, owing to the exertions of the Board of Mines, the working of them has commenced, and better directed efforts have led to new discoveries.

The number of mines now in work is 13. The richest ore, produced from the mines of the Gamnholm and Oïama, contains from 53 to 54 per cent. of metal ; whilst the poorest, that of the Youssaro mine, yields thirty per cent. of cast iron.

The smelting of these ores is performed in eight different furnaces, which consume more ore even than Finland can at present furnish ; the deficit is supplied by Sweden. Almost the whole of the cast iron produced by them is distributed amongst the forges established in different parts of the country, to be by them converted into wrought iron. These forges, in number 16, manufacture annually about 13,193 schippund, or 121,350 poods of wrought iron.

The habit of giving a preference to foreign produce, the want of capital, and the uncertainty of success, are the causes which appear to have hitherto retarded the advance of this branch of the national industry ; but there is every reason to hope that experience, and,

above all, the recent discovery of very rich mines, will contribute to develop it to its fullest extent.

As to those immense beds of iron ore which extend throughout the country, along the shores of lakes and at the bottom of marshes, the working of them is so easy as to have been practised almost from time immemorial.

The number of forges and smelting-houses in the interior of Finland is considerable, but they are generally small, the largest not producing more than 200 schippund of iron. The government does all in its power to encourage this description of industry, by granting exemptions from taxes, and offering premiums.

Seven new forging establishments have lately been erected; and experience has proved that the marsh ore is preferable to any other, the wrought iron produced from it being tougher, and less ductile.

Next to iron, copper is the most important mineral of Finland. Up to the present time only one copper mine, that of Ovi-yervi, discovered in 1758, has been worked. M. Omelianoff has, however, lately obtained a patent for the working of copper and tin mines found near Nitkaranda. Success appears certain, and it is hoped that the mines of Finland will henceforth receive all the attention their importance demands.

SOME ACCOUNT OF THE PROVINCE OF TOBOLSK.

CONSIDERABLE difference, both in soil and climate, must necessarily be found in the various parts of a province which, like that of Tobolsk, comprehends an extent of 18,307 geographical square miles, and lies between the 55° and 74° of latitude.

Whilst, towards the north, the plains extending from the river Ob as far as the Icy Sea form but one vast morass, which is covered with moss, and contains a prodigious quantity of fossil remains, the land in the southern districts is remarkable for its vegetation, being equally adapted for tillage or pasture; the forests abound with game; navigable rivers, well stocked with fish, intersect the country; and the towns, although as yet few in number, and separated from each other by wild and uncultivated deserts, have, notwithstanding, attained a much greater de-

gree of importance and prosperity than is generally imagined.

As to their history, almost all of them have arisen upon the ruins of some Tartar city, respecting the origin of which tradition has not been silent. It was probably towards the close of the fifteenth century that the Tartars, having founded an empire upon the banks of the Tobol and the Irtysh, by the subjugation of the Finns, the Ostiaks, and the Vogouls inhabiting them, and at a later period by the conquest of the numerous hordes under the sway of the Khan of Siberia, often devastated the provinces adjoining Russia, at the foot of the Oural mountains. At length, in 1584, Yermak, an intrepid Cossack, whose name is illustrious in Russian annals, was the first who dared, with a handful of men, to cross the Oural mountains, and to penetrate into those vast and unexplored forests which served as haunts for the enemies of his country. After a few battles he succeeded in making himself master of the city of Sibere, the centre and capital of the Tartar empire. This expedition, projected by and undertaken at the sole expense of the *Strogonoffs*, (noblemen who might be called the wardens of the frontiers,) was no sooner crowned with success, than the Czar, Ivan Vassilevitch, despatched reinforcements to the adventurous chieftain. Succeed-

ing monarchs maintained, in like manner, the war against the Tartars, who, finding themselves everywhere defeated, abandoned all hope of re-establishing the Khanate of Siberia.

The Czar, Boris Goudounoff, contributed most efficaciously to complete the conquest by the colonisation of the newly-subjected country ; and the origin of the greater number of Russian towns in this part of Siberia may be traced to his reign.

This number is, at present, nine, of which the most important, Tobolsk, was founded in 1587 by 500 Cossacks, upon the right bank of the Irtysch, exactly opposite where the Tobol forms a confluence with it, and about sixteen versts from the ancient Sibere, which was gradually abandoned for the new town. Tobolsk, which at its commencement consisted only of a wooden fort, a church, and a few huts, is now the metropolis of a government, the residence of the governor-general of Western Siberia, and an archbishop's see. It contains 18 churches, 1,762 houses, 25 of which are built with stone, and 15,379 inhabitants. The right bank of the Irtysch being much higher than the opposite one, the summit affords a most magnificent prospect of the vast plains watered by the Tobol ; and the position of the town itself, partly built upon the top and partly at the foot of the rugged ascent, is

extremely picturesque. The streets, which are mostly paved with wood, intersect each other at right angles ; and several remarkable and elegant edifices embellish the upper town. Chinese silks and Boukharian stuffs of the richest qualities are displayed in the bazaars, in quantities far exceeding those of European manufacture. The markets are abundantly stocked with provisions, especially game and fish ; and the 500 fruit and kitchen gardens in the immediate vicinity of the town produce a greater variety of fruits and vegetables than might be expected to be found under so severe a climate.

Of the other towns, all of which, excepting one, are built to the south of Tobolsk, Tumene is the most considerable. It is situated on the fertile banks of the Taura, and reckons 11 churches, 1,833 houses, two of which only are built of stone, and 9,213 inhabitants : the produce of its tanneries amounts annually to more than a million of roubles. Berezoff, the only town founded by the Prussians to the north of Tobolsk, is situated upon the banks of the Ob : the severity of the climate and the nature of the soil forbidding all attempts at agriculture, the chase and fishing constitute the sole resources of the inhabitants. This colony, founded in 1595, has derived some importance from its fur trade.

The following table may give some idea of the actual state of those different towns :

In 1835.

	Houses of Stone.	Houses of Wood.	Inhabitants.
Tobolsk contained	25	1,737	15,379
Tumene	2	1,831	9,243
Tourinsk	8	699	2,685
Kourgane	3	428	1,912
Yaloutorovsk	3	435	2,009
Tara	1	787	4,263
Ischime	0	363	1,180
Toukalinsk	0	243	1,380
Berezoff	0	166	611
Total	42	6,689	39,631

The churches were 49 in number, of which 47 were built with stone ; the monasteries were three, situated at Tobolsk, Tumene, and Tourinsk.

As to manufactures, these towns are confined to soap-boiling, the melting of tallow, and the making of leather, the tanneries being 114 in number, and employing 390 workmen. Trade is the principal occupation of the inhabitants, even of those who are not actually dealers, properly so called : with the exception of the clergy and persons employed in the service of government, all are engaged in it, exchanging the

produce of European Russia,—corn, meal, and iron, tools and utensils,—for the skins, cattle, caviar, fish salted and fresh, and game, brought to them from the interior by the Ostiaks or Tartars.

The large rivers, navigable in summer and covered with ice in the winter, facilitate the communication in both seasons: the sledges used by the inhabitants are in the south drawn by horses, and in the north by dogs and rein-deer.

Every year the merchants of Tobolsk, Tumene, and the other towns, send boats laden with flour up the Irtysch and the Ob to Berezoff and the other small towns situated farther to the north; these boats return freighted with fish. The clerks and agents belonging to these merchants, and who are established in the small towns upon the banks of the Ob, purchase of the Ostiaks valuable furs, which, together with soap, tallow, and leather, they afterwards export, partly to the fair of Nijny-Novgorod, and partly to the Kirghises of the Steppes, who pay them in horses, cattle, and cotton stuffs, purchased by themselves of the Boukharians: the remaining produce of the government of Tobolsk is exported by the way of Kiakhta into China, whence are brought in exchange silks and tea.

Public instruction, notwithstanding the many obvious difficulties opposing it, makes considerable pro-

gress in this portion of the Russian empire. Tobolsk has two ecclesiastical schools, with 13 masters and 436 pupils : the number of establishments of this kind throughout the government is 11, with 34 masters and 686 pupils

COLONIES OF THE GOVERNMENT OF SARATOFF.

THE southern provinces of the Russian empire, which are now so rapidly increasing both in importance and wealth, were almost wholly uncultivated at the commencement of the eighteenth century. Peter the Great, who appears to have foreseen the future destiny of Russia, and to have traced in his mind the path she was to pursue, purposed turning immediately to account the natural riches of those vast countries. It was his intention to introduce agriculture there, to form permanent establishments, and to prepare new channels for commerce, by uniting the Don with the Volga by means of a canal. But not having been able to keep the port of Azof, by which those provinces could export their commodities, he died before it was possible for him to realise his brilliant conceptions.

The glory of commencing their execution was reserved for the Empress Catherine II., who, from the moment of her accession, was occupied with the care of attracting and establishing in those vast solitudes an agricultural and industrious population. The labours undertaken for that object, and persevered in for many years, were at length crowned with success. Whilst, on the one hand, numerous villages and new towns were built and founded in the Steppes situated between the Dnieper and the Don, cultivation, on the other, made an equally rapid progress in those immense plains which are traversed by the Volga, and which separate the government of Astrakhan from the central provinces of the empire.

Before even agriculture was introduced into the territory which now forms the government of Saratoff, and which is 3,473 square geographical miles in extent, the commercial relations of the central provinces with Astrakhan and the Caspian Sea had caused the foundation of Saratoff, and of several other towns, situated upon the shores of the Volga in the midst of the deserts. Along the northern borders also was seen a thinly-scattered Russian population; some Finnish tribes lived upon the banks of the rivers, or in the vicinity of the woods, making agriculture and fishing their chief occupation, while Tartar hordes wandered through the Steppes.

Such was the aspect of the country to which Catherine II. was desirous of imparting culture and civilisation. Several considerations induced her to attract thither foreign colonists. In the first place, not any of the Russian provinces was as yet so overstocked with inhabitants as to be in a condition to spare any of them ; besides which, the Empress judged it expedient to establish there a population which, coming from European countries where agriculture was most advanced, might serve for an example and a model. The Empress attached so much importance to these plans, that she lost not a moment in carrying them into execution. On the 22nd of July, 1763, being scarcely a year after her coming to the throne, she promulgated a decree, by which foreign colonists were invited to come and take possession of the lands destined for them on the shores of the Volga.

Great numbers of Germans and Swiss shortly arrived at Saratoff, where they were joined by some French and Swedish families : the total number soon reaching ten thousand. They were at first received in large barracks near the town. Habitations were afterwards built for them upon the ground which had been assigned them ; and in addition to the free gift from the generous sovereign, of implements, tools, flocks, milch cows, and seeds, besides provisions suf-

ficient to last them for a considerable space of time, they were freed from all taxes for the period of ten years. With such assistance the colonists soon found in their country ease and happiness; and gradually extending themselves, founded as many as 104 villages, of which two were subsequently abandoned. Some of these establishments are upon the left bank of the Volga, near the river, in places most favourable for agriculture.

The greater number, however, are situated upon the right bank, between the Volgsk and Kakmyschine, and upon the borders of the Medvédista, and the Ilavlia, small rivers falling into the Don. The names of these villages, Soleure, Schaffhouse, Zurich, Glaris, Lucerne, Unterwalden, &c., recal to mind the ancient country of their inhabitants: other colonists endeavour to express their gratitude by giving to their little town the name of Catherinestadt. Sixty-three of these colonies have protestant or reformed churches; in the majority of the others the Roman Catholic religion is professed; one alone has been founded by the Moravian brethren, who still exclusively inhabit it; this is the small town of Sarepta, so beautiful and flourishing, notwithstanding the aridity of the steppe surrounding it, and the losses it has experienced by frequent conflagrations. The Moravian brethren, who had chosen this site,

not expecting to obtain the means of subsistence from the cultivation of the land, endeavoured to make up for it by the establishment of several small manufactories of stuffs, tobacco, liquors, &c. ; and it is solely to this active industry that they are indebted for the welfare they now enjoy.

In 1824 the town contained fifty-seven houses built of stone, one hundred and eighty-five of wood, twenty-five hangars, and two windmills, thirty water-works for supplying irrigating canals from the river Sarpa, and three large aqueducts, which supply the town with abundance of excellent water. All the streets, planted with poplar, terminate at the market-place, which is ornamented with a fountain. Among the public buildings, three are remarkable for their object ; the Asylum of Sisters, which is inhabited by all the unmarried women of the colony ; that of Brothers, in which live all the bachelors ; and the third is an asylum for widows. The two first contain schools for the education of the children. The gardens surrounding the town are cultivated with the greatest care, and everything presents a smiling picture of prosperity and contentment.

In the year 1811 the population of these colonies had increased to 55,000 souls ; in 1816 the number reached 61,000 ; at the commencement of 1835 it was 105,574 ; and at the beginning of the following

year 109,796, viz. 56,104 men, and 53,692 women. In 1835 the number of births was 6,330, whilst that of deaths did not exceed 2,108. In 1834 the fields sown with 150,017 tchetverts of grain, &c. (including potatoes,) produced a harvest of 1,158,259 tchetverts; in 1835 the quantity sown was 173,358 tchetverts, but the harvest proved less abundant. Notwithstanding this, the colonists were enabled to sell 120,773 tchetverts of corn for the sum of 836,000 roubles, and 136,843 poods of tobacco, which produced 310,981 roubles. In the plantations of mulberry trees, which had somewhat suffered from the severity of the winter, there were, however, not less than 16,241 feet of trees, and the silk-worm nurseries have yielded 10 poods 24 lbs. of silk. Lastly, the cattle have increased with the improvement of agriculture. In 1834 the total number of heads of cattle of every description in the villages was 235,493; the following year their number increased to 264,788; and out of 87,532 sheep, included in it, 1,220 were of the Spanish breed.

Such results are a gratifying reward to government for its paternal care, and for the sacrifices it hesitated not to make, in order to secure the welfare and prosperity of these colonies.

RECENT VOYAGES AND DISCOVERIES
OF RUSSIAN NAVIGATORS IN
NOVA-ZEMBLA (NOVAIA-ZEMLIA.)

At a time when, under the direction of the minister of marine and of the St. Petersburg academy of Sciences, a new expedition is about to visit the inhospitable shores of Novaia-Zemlia, it may not prove uninteresting to give some account of voyages recently performed in those parts by Russian subjects.

Novaia-Zemlia was certainly discovered, at a very remote period, by the Russian inhabitants of the shores of the White Sea. Not only is its name a proof of this, but it even appears that the Dutch navigators, Heemskerk and Barenz, who in 1596 endeavoured to discover a passage to the Indies through these seas, had, previously to their departure, a vague

notion of the existence of these islands. It is well known that these courageous mariners, in spite of the obstacles which threatened at every moment to arrest their progress, coasted the whole of the western shores of Novaia-Zemlia, and reached its most northern point ; but that having arrived on its eastern sides, their ships were blocked up by the ice, and themselves compelled to winter there ; after this, their only alternative was to return, braving in their frail barks all the perils of the icy sea. The charts, however, which have been constructed upon their authority, are anything but correct—a circumstance not to be wondered at, if it be considered that not only their mathematical instruments were very imperfect, but that they themselves were wholly ignorant of the effect of refraction, always much greater in these high latitudes than in places nearer the equator : the longitudes and even latitudes, determined by these navigators are, consequently, extremely erroneous.

The Russians in the neighbourhood of Archangel, who were engaged in the walrus trade, still continued to visit the shores of Novaia-Zemlia ; but these frequent voyages were unproductive of any scientific results : the northern point which Heemskerk had doubled, was not reached by them, and the eastern coast appeared quite inaccessible. A very small part only of the coast was explored in the 18th century by Rosmys-

loff, who also examined Matotchkine-Schar, or the canal which separates the two islands that form Novaia-Zemlia.

At length, during the years 1819-24, five separate expeditions were despatched by the Russian admiralty to these frozen regions. The first was commanded by Captain (now Vice-Admiral) Lazareff, the four others by Captain (now Rear-Admiral) Leitke. Repeated but unsuccessful attempts were made to penetrate into the Karskoe Sea, through the strait which separates the island of Waigatch from the southern extremity of Novaia-Zemlia. The whole passage was constantly blocked up by an impenetrable barrier of ice, so that Captain Leitke was obliged to confine himself to the examination of the western coast of Novaia-Zemlia, as far as the 77° of latitude, at which point his progress was again stopped by the same formidable obstacle. Thanks, however, to his exertions, we now possess an accurate idea of the configuration of this coast, and have ascertained that the two islands comprised under the name of Novaia-Zemlia extend in a slight curve from south-west to north-east from the 71° of north latitude to a little beyond 76° . Although Captain Leitke considered the furthest point reached by him as the *Cap Nassau* of the Dutch, it is possible that it was *Cap Désiré* of Heemskerk, which is to this day the northern extremity of Novaia-Zemlia.

In 1832, some private individuals equipped, at their own expense, an expedition, combining both commercial and scientific objects. Three vessels having, by permission of the Minister of Marine, been manned and officered from the fleet, proceeded, according to their instructions, in different directions. The first returned in the autumn, with a rich cargo of walrus teeth and blubber.

The destination of the second vessel, commanded by Lieutenant Krotoff, was the south-western coast of Novaia-Zemlia; thence it was to proceed through the Matotchkine-Schar, in order to reach, if possible, the mouths of the Ob or of the Yenissei, by crossing the Karskoe Sea. This vessel sailed, accordingly, from Archangel on the 1st of August, 1832, and on the 7th arrived in sight of Cape Kanine-Noss, after which no further intelligence was received of her, until, in 1834, Pakhloussoff discovered her wreck in the bay of Sérébrianoi: all the crew appear to have perished.

The instructions of Pakhloussoff, who commanded the third of these vessels, were, that he should enter the Karskoe Sea, coast the eastern shores of Novaia-Zemlia, and construct a chart of them. Having sailed from Archangel on the 1st of August, he found himself, so early even as at the end of the month, stopped at the entrance of Port Kara by an insurmountable barrier

of ice. He immediately determined to winter in *Kamenka* bay. A hut which he built upon the shore, twelve feet long, ten wide, and seven high, was the winter abode of his crew, who had very often to defend themselves against the attacks of bears, besides enduring all the privations and overcoming all the difficulties so powerfully described by Heemskerk and Bareuz. At length, on the 24th of June, 1833, the ice was sufficiently open to allow Pakhloussoff to pass the strait in a boat, for the purpose of examining a part, at least, of this formidable eastern shore, and at the mouth of a small river, about one hundred versts from the southern point, he perceived a cross which was thrown down: the inscription it bore was completely illegible, excepting the date of 7250, (from the creation of the world,) and the words *Sava Tofanoff*. As Loschkines' baptismal name was known to have been the rather uncommon one of *Sava*, it cannot be doubted that this cross had been erected by him; the certainty of his voyage and the time when it was performed, (the year 1742 of our era,) are therefore clearly ascertained. Returning to Kamenka Bay on the 7th of July, Pakhloussoff succeeded in disengaging his vessel from the blockading ice; and his crew having, on the 11th of July, quitted the hut which had sheltered them for two hundred and ninety-seven days, passed Port Kara, and again sailing up the

eastern coast, reached the entrance of Matotchkine Schar on the 18th of August; this canal was traversed in two days, and by returning westward, Pakhloussoff was the first to accomplish the navigation of the southern part of Novaia Zemlia.

The following year Pakhloussoff was again sent with two vessels to Novaia Zemlia, and quitted Arkhangel on the 24th July, 1834. His instructions were to complete the laying down of the eastern coast to the north of Matotchkine Schar. Not to run useless risks, the expedition proceeded to the entrance of the canal, on the western side of the island, and an attempt was made to pass through it. Having arrived on the 14th of September, through floating ice which was with difficulty kept clear of the vessel, at the opposite extremity of the canal, the Karsko Sea presented itself to them, covered with one uniform sheet of ice; advance was therefore impossible, and even in their retreat they were compelled to cut their way with the hatchet, the hitherto floating ice being now converted into fixed masses. A hut of considerable dimensions, constructed upon the southern bank of Matotchkine Schar, afforded them shelter during the winter. Hence Pakhloussoff proceeded on foot, in the month of April, to construct an accurate chart of this canal. A second expedition, under the orders of Ziwolka, his fellow navigator, was ordered to explore

the eastern coast to the north of Matotchkin Schar. This officer penetrated as far as one hundred and fifty versts northward, and would have proceeded still further in that direction, had not the fear of their provisions failing them compelled the party to return to their winter abode, after an absence of thirty-four days.

About two months afterwards, Pakhloussoff and Ziwolka both embarked on board the latter's vessel, the Kosakoff, with a view of following Leitke's track to the west of Novaia-Zemlia, of doubling, if possible, the northern point, and of returning by the opposite shore. But having, on the 9th of July, rashly adventured between two floating mountains of ice, their vessel was crushed to pieces so suddenly, as scarcely to allow the crew to reach, in safety, the shore of a neighbouring isle, with their boats, a few fire-arms, and a very small quantity of provisions. After remaining on this desolate spot for thirteen days, they were released from the horrors of impending death by a walrus vessel, which brought them back again to Matotchkin Schar. After another expedition made to the eastern coast, Pakhloussoff died at Arkhangel. His companion Ziwolka has constructed a chart or map of Novaia Zemlia, much more complete than any hitherto published ; having, in addition to his own and his friend's observations, acquired other accurate information from various sources.

Another expedition is about to sail, whose object is more particularly the making of collections of the natural history of Novaia-Zemlia. M. Ziwolka will have the command of the Krotoff, and will be accompanied by several Russian naturalists. The examination of the coasts of the Gulf of Bothnia, the level of the Black and Caspian Seas, the geographical researches in the Oural mountains, and the trigonometrical admeasurements upon the western limits of the empire, are all simultaneous labours at present in execution, replete with interest worthy the great monarch who has ordered them to be undertaken.

SOME ACCOUNT OF THE TRADE OF KIAKHTA.

IN the seventeenth century Russia became the immediate neighbour of China by the conquest of Siberia ; and as the tribute paid by the Tartars and other tribes inhabiting it consisted wholly of furs, the quantity of them accumulated in the Moscow warehouses far exceeded the demand both for home consumption and for the exportation trade to Turkey and Persia. Under these circumstances, the idea naturally suggested itself of forming commercial relations with China ; and the estimation in which furs were held by the inhabitants of the Celestial Empire, as well as the now more general use of tea in Russia, rendered success more probable.

In 1689, Peter the Great concluded a treaty of peace with the reigning Emperor of China. The

limits of both empires were laid down as well as the imperfect knowledge of the country would permit, and the subjects of both the contracting powers were permitted to pass freely from either territory to that of the other, in prosecution of their commercial affairs.

From that time caravans regularly set off at stated periods from Moscow for Pekin, and, in exchange for the rich furs sent thither by the Russian government, brought back from China, silks, nankeens of different colours, rhubarb, musk, porcelain, precious stones, gold dust, silver in bars, and especially teas in large quantities. Different circumstances, but chiefly the mistrust, so great an ingredient in the Chinese character, caused various interruptions to this intercourse, till at length, in 1722, the communication between the two empires was completely broken off. Five years afterwards, however, Bagounisky, ambassador of Peter the Great at Pekin, succeeded in arranging a new treaty of commerce, which was subsequently ratified by Peter II. Several parts of the frontier limits, before vaguely traced, were now accurately determined; the Russian preserved the right of sending, once every three years, a caravan direct to Pekin, and of having in that capital a factory and a church. To facilitate the objects of the treaty, it was agreed that a plain situated upon the frontier, near the

little river Kiakhta, should serve as an entrepôt and place of barter. Similar entrepôts were also to be formed upon the banks of the Selenga and at Nertchinsk.

In a very short time the trade carried on at the frontiers by private individuals became far more profitable than that of the caravans sent to Peking by the Russian government. The jealousy and mistrust of the Mandarins rendered the communication with the inhabitants of the interior extremely difficult; nor could the Peking merchants themselves obtain permission to visit the Russian factory, without bribing the numerous persons in office; the consequence of all which was, that the Russian furs were sold at a loss, while the Chinese produce and manufactures were purchased at a much higher rate than was paid for them on the frontiers. Convinced by experience of the impossibility of finding any remedy for these evils, the Russian government discontinued, in 1755, the sending caravans to Peking; the fur trade on government account was entirely given up, and every effort was now directed to the encouragement of the private trade.

The frontier trade now rapidly increased, and the necessity which persons engaged in it found themselves under of being upon the spot, soon caused the temporary habitations, such as tents and huts, to be

converted into regular dwellings, and two towns quickly arose upon the site appointed by the treaty as an entrepôt and place of barter. The one, Russian, was called Kiakhta, from the name of the little river which bathed its walls; the other, Chinese, was known by the appellation of Maïmatchine, which signifies *the town of sales and purchases*. These two towns were separated only by an esplanade of small extent; on one side, to the north, appeared a gate of European architecture, a Russian guard and sentinels; on the other was seen one of those fantastical edifices which the Chinese erect at the entrance of their towns, having its walls covered with grotesque sculptures, inscriptions, and paintings in gaudy colours. At Kiakhta regular streets are formed of those neat houses which compose the provincial towns in European Russia, and near the vast storehouses belonging to the American company, or the shops established by the rich merchants of Moscow, Vologda, and Koursk, rise the cupolas and bells of several churches. At Maïmatchine, on the contrary, the streets, gloomy and narrow, are formed by walls with no windows in them. The court-yards enclosed by these walls have round them small dwelling-houses, warehouses, and shops, in which is seen all the rich produce of China.

The intercourse between these two towns, so near to and yet so different from each other, becomes daily

greater in proportion as the Russian trade, which is carried on, almost exclusively, by a few commercial houses of Moscow, Volgada, and Koursk, increases. An immense quantity of tea is annually imported into Russia by this way. The superior qualities are more appreciated and in greater demand there than at Canton itself, while a commodity, as yet hardly known in Europe, viz. tea in cakes, forms one of the most important articles of the Kiakhta trade. These cakes are composed of a mixture of tea and of the leaves of a plant of the saxifraga genus, found in the southern part of the Mongol Steppes, and which is first steeped in lambs' blood. After being well kneaded and pressed in cakes, the mass is dried in an oven. The manner of its use is equally singular: these cakes are dissolved in boiling water mixed with meal, fat, and salt. This tea is in great request throughout all the nomadic tribes of Central Asia, and the Russian merchants buy at Kiakhta considerable quantities of it, to be again sold at the fair of Nijny-Novgorod, to the wandering Tartars or Moguls subject to Russia.

Next to tea, Chinese cottons were the most remarkable article imported—especially nankeens—which were sold in packets containing ten pieces each; these packets, which were called tounes, might be said to represent the numerary notation, or rather the circulating medium, the value of goods being generally

expressed in numbers of *tonnes*, or tens of *tounes*. Within these few years, however, great changes have taken place; for the Chinese merchants now buy of Russian traders cotton, stuffs, and even nankeens, perfected in the Russian manufactories.

From China are also received silks, especially flowered damasks, crapes, cotton, raw silk, rhubarb, camphor, musk, China ink, and a quantity of other drugs; and lastly porcelain, and that beautiful lacker-work, the secret of which seems exclusively their own.

In exchange, the Russian merchants supply them with furs; and this branch of trade, at all times important, has become still more so since the American Company has forwarded to Kiakhta, by way of Okhotsk, the annual produce of the chase, regularly followed under the direction of their agents in the Russian American colonies. The beautiful beaver-skins they send are even preferred by the Chinese to every other fur. Amongst the other articles of export, the most important are, leather, glass, steel, and within these few years Russian manufactures, the demand for which is always increasing, as proved by the following table of exports in three different periods.

	1825.	1830.	1835.
Linen to the amount of	70,119 rbls.	139,231 rbls.	203,115 rbls.
Cotton stuffs - -	1,248 —	84,523 —	933,876 —
Cloths - - -	268,421 —	1,434,550 —	2,266,641 —

Upon the arrival of the first caravans, which takes place at different times between the end of the month of December and the commencement of February, the greatest activity prevails at Kiakhta and Maïmatchiné. The Chinese merchants then repair to Kiakhta, proceed to the warehouses, examine the goods exposed for sale, agree upon the price, and, after having affixed their seal to the bales they have chosen, invite the Russian merchants to accompany them to Maïmatchiné. There, in the bazaars of the Chinese town, the Russians, rendered circumspect by experience, place the goods they select in exchange under the care of a sentinel, who is not to lose sight of them until the exchange be actually effected; but, in spite of all their precautions, they are often cheated. The Chinese, far from imagining that good faith and honesty are the natural bases of commerce, endeavour to gain an advantage by every means which cunning can devise. Sometimes they endeavour to sell their neighbours old tasteless tea, by concealing it under a layer of fresh: as to the silks and cottons, they sell them in packets; they are made up of pieces differing in quality and colour, and as the sellers never permit any choice or selection, a too confiding purchaser is frequently astonished at finding in the middle of the packet he has just bought, boards whose edges are cut and

painted with much art, in order to imitate the pieces of stuff.

It must not, however, be supposed that the roguery of a few individuals has been able to operate unfavourably to the progressive increase of the trade of Kiakhta. The following table will show its great improvement and activity of late years.

1825.

	Roubles.
Russian merchandise exported, amounting to	4,162,437
Transit - - - - -	1,339,378
Total exports	5,501,815

1830.

Russian merchandise exported, amounting to	4,415,024
Transit - - - - -	1,983,573
Total exports	6,398,597

The trade of Kiakhta being that of barter, the imports necessarily balance the exports. In the transit merchandises Polish manufactures are included.

1835.

EXPORTATION.—*Russian merchandise.*

	Roubles.
Skins, to the amount of - - - -	2,229,377
Leather - - - - -	742,481
Linen - - - - -	203,115
Cottons - - - - -	933,876
Cloths, 718,221 archines - - - -	1,799,691
Corn, iron, steel, copper, glass, and other articles,	1,446,148
Total	6,414,688

TRANSPORT OF GOODS.

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Polish cloths, 206,301 archines	-	-	-	466,950
Transit merchandises	-	-	-	545,731
Grand total				7,427,369

IMPORTATION.

					Roubles.
Tea, 199,233 poods, to the amount of	-	-	-	-	6,909,149
Silks	-	-	-	-	208,599
Cottons	-	-	-	-	122,726
Drugs, &c.	-	-	-	-	186,895
Total					7,427,369

The Chinese mostly use camels for the conveyance of goods, traversing the Steppes in long caravans. The Russians chiefly transport by water the merchandise which they send in summer, or oftener in spring, from Kiakhta to Europe. After descending the Salenga and crossing the Backal lake, they arrive at Jenisseck by following the course of the Angara. From Jenisseck the goods are sent overland to the banks of the Ket, and from thence they reach Tobolsk, the central entrepôt of Siberia. From Tobolsk they are sent in sledges, either to the fair of Irbit, which begins on the 5th February, or, being embarked in vessels, arrive the following summer at Nijny Novgorod.

PERMANENT MAGNETICAL OBSERVATIONS IN RUSSIA.

GREAT as has been the general improvement of the Russian empire, the attention of the government to the promotion of science has been no less. A convincing proof of this is observable in the measures it has lately adopted for carrying into effect the views of Messrs. Alexandre de Humboldt, Arago, and Kupffer, members of the St. Petersburg Academy, respecting magnetical observations. Even previously to the celebrated letter of the former of those gentlemen, addressed to his Royal Highness the Duke of Sussex, in which, among other valuable suggestions, he insists upon the necessity of multiplying observations, and of continuing them through successive years in one uniform method, and in permanent observatories, established in different latitudes, and at various distances from the magnetical equator ; the immense advantages

resulting from similar labours had been discussed at the sittings of a committee of the Imperial Academy of St. Petersburg, having for its chairman the Baron de Humboldt, who was at that time travelling in Russia. From that moment the Academy took an active part in these interesting researches. A magnetical observatory was immediately organised, under its direction, at St. Petersburg, another at Casan, under that of the rector of the university of that city; a third was soon in activity in Moscow; and Admiral Greig established a fourth at Nicolaieff, upon the borders of the Black Sea. The Academy of Sciences did even more; they despatched a distinguished astronomer, M. George Fuss, to Peking, where, in the garden of the convent belonging to the monks of the Greek church, he commenced a series of magnetical observations, which have been since continued by M. Kowanko.

The government, upon its part, powerfully contributed to the progress of these labours by placing at the disposition of scientific men the means of multiplying their experiments. Thus, at the recommendation of his minister of finance, his Majesty the Emperor was pleased to order, in 1834, the organisation of seven new permanent observatories, placed under the direction of the corps of mining engineers, and divided into three different classes; one model

observatory at St. Petersburg ; three others, furnished with the necessary apparatus and instruments for magnetical and meteorological observations, at Catherinebourg in the Oural, Barnaoul at the foot of the Altai, and at Nertchinsk, near the confines of the Mogul Steppes ; and lastly, three destined exclusively for meteorological observations, at Bogosloosk, in the northern part of the Oural mountains, at Catherinebourg in the southern part of this chain, and at Lougane in the government of Catherinosloff, not far from the shores of the Sea of Azof.

The model observatory, established at the Institute of the Mining Corps, and the three establishments of the second class, have already commenced their labours, and the three others will shortly do the same.

At each of the stations above mentioned a small building has been erected, in the construction of which the greatest care has been taken not to admit the least particle of iron. The magnetic needle is therein completely isolated, and removed from all accidental influence. Each observatory is furnished with a theodolite, having the additional apparatus invented by M. Gauss, for observing the absolute declension and its fluctuations ; a Gambey compass, an instrument preferred by all European astronomers, for taking the horary observations of the diurnal motion of the needle ; an inclinatory by the same maker, astrono-

mical watches, and a complete meteorological apparatus. Before being forwarded to the places of their destination, all these instruments are tested in the model observatory, and carefully compared with those used in that central establishment, which is placed under the immediate superintendence of the academician Kupffer, the head director of all these establishments.

It is intended to test, in this manner, all the apparatus and instruments destined for the secondary establishments, and also by a regular course and series of observation, to endeavour to form a certain number of pupils, to whom may hereafter be confided the direction of the minor observatories. In order that the labours of all these establishments may be conducted with a uniform regularity, M. Kupffer has, moreover, drawn up detailed instructions for the magnetical and meteorological observations. The engineers of the mining corps, who superintend the secondary observatories, are required to conform to these instructions, and to forward every month to the central board a report upon the results of their operations: these results will, from time to time, be published in the *Journal of the Mining Corps*.

Besides the horary observations, simultaneous ones are made six times a year in all these establishments. For this purpose, the last Saturday of every month

which has an unequal number of days has been chosen. At these periods, observations, renewed every five minutes, commence at twelve o'clock in the morning, and continue till the next day at the same hour, (*mean time of Gottengen.*) In like manner observations are repeated every three minutes in succession, on the Tuesday and Wednesday following, from eight till ten at night, (*mean time of Gottengen.*) All these observations must therefore be perfectly isochronical with those made in the principal magnetical observatories of Western Europe.

The results to science from labours such as these will necessarily be incalculable, and they have already begun to afford most interesting comparisons. By the report of observations made during a period of four years at Nertchinsk, it appears, for instance, that at that place the inclination of the magnetic needle increases, whilst in Europe it diminishes; on the 5th of August, 1832, the inclination observed was $66^{\circ} 33' 4''$, increasing afterwards pretty gradually; on the 25th of March, 1836, it was $67^{\circ} 8' 3''$. As to the absolute declension, it diminishes at Nertchinsk as at St. Petersburg. According to observations made in the former of these towns, it was, on the 5th August, 1832, $4^{\circ} 4' 3'' 0$; on the 25th March, 1836, it had diminished to $3^{\circ} 25' 7'' 0$.

The diurnal motion of the needle at Nertchinsk

coincides exactly with that observed at St. Petersburg; that is, the declension increases there from eight o'clock in the morning until two o'clock in the afternoon.

The perturbations have been tolerably frequent at Nertchinsk. It has been remarked that there, as elsewhere, they preceded and accompanied the aurora borealis; but they are not isochronical with those remarked at St. Petersburg, whilst the latter perfectly coincide with the perturbations observed at Casan and Barnaoul.

BLAGODATE IRON MINES.

A SECONDARY branch of the canal, at present known under the name of the Blagodate mountain, forms one of the most remarkable parts of that chain of rocks, richer in interesting phenomena than any others to be found in Europe. Situated in the department of Verkhouteric, about two hundred and ten wersts from Catherinebourg, the only appearance which Blagodate presents to the eye of the traveller is an enormous mass of rock.

The numerical riches contained in these hills, at that time covered with almost impenetrable forests, were still unknown at the commencement of the eighteenth century. Their woody summits were only occasionally visited by a tribe of Vogouls, a people of Finnish origin, inhabiting the neighbourhood, and who had chosen the most elevated peak of Blagodate whereon to celebrate the religious rites of their worship.

It was in 1730 that an individual of that nation, named Tchoumpine, informed the Catherinebourg Board of Mines of the existence of the valuable iron mine which is now in process of working. Having forwarded specimens of the mineral, he was liberally rewarded; but his countrymen, indignant at the profanation of the sanctuary, inflicted upon him a dreadful punishment: having seized him during the night, the wretched Tchoumpine was burnt alive upon the top of Blagodate.

The engineers who were despatched to the spot were equally astonished at the importance of the discovery which they owed to the unfortunate Tchoumpine, and at the singular appearance of the hill itself, to which they gave, in honour of the Empress Anne, the name of Blagodate, the Russian equivalent for the Greek word *ἀννα*. The height, whose summit is raised seventy sagenas above the level of the reservoir of the Kouchva mining establishment, is composed of sienitic porphyry; a layer of loadstone, forty sagenas in thickness, covers the eastern side of it for an extent of two wersts, and appears to descend, to what depth is unknown, below the level of the surrounding plain; there is also a layer of sienitic eurytum, which commences at the foot of the mountain, and reaches to about the half of its height, from which point to the summit the iron ore is uncovered. The working of

this mine is extremely easy. The ore found at the surface may be obtained with the simplest implements ; and even at a considerable depth, where the ore is more compact, it can be extracted with comparatively little difficulty.

In consequence of this facility, no less than 1,500,000 poods of ore, yielding about 57 per cent. iron, are annually obtained. The smelting is performed in five different establishments in the neighbourhood.

In 1826 the government caused a monument to be erected to the memory of the unfortunate Tchoumpine upon the summit of the Blagodate, beside a small chapel, and on the 6th of August every year the workmen of the Kouchva mine repair thither in procession, to offer up their prayers to heaven for the repose of his soul.

FISHERIES IN THE RIVER OURAL.

IN some of the southern provinces of the Russian empire, especially in those which are watered by the tributaries of the Caspian Sea, fishing has always been one of the most important branches of the national industry. The dry and barren character of the Steppes which form the government of Astrakhan and a part of that of Orenburg, being wholly opposed to agriculture, the people inhabiting those regions have found some compensation in the resources offered them by the well-stocked rivers which traverse those plains. These rivers, the Volga and Oural especially, are so abundant in fish, that even after the lapse of centuries the fishery has not become less productive, and every year immense quantities of dried and salted fish, of caviar, isinglass, &c., are exported from these shores,

either into the interior of the empire, or the countries of Central Asia. The fishery has consequently been a primary object of attention with the local authorities ; the prosecution of it is subjected to regulations which are strictly observed, while the commencement and the close of it, being considered as the most important events of the year, are announced with due solemnity.

The mode of fishing varies according to the season. Upon the banks of the Oural the winter fishery is the most interesting. Preparations are made for it in the month of June by closing, near the town of Ouralk, the passage to the swarms of sturgeons which ascend the river, in order to hibernate near the head of it. A kind of barrier, formed with palisades and nets to fill up the interstices, is fixed for this purpose in the bed of the river ; all fishing, and even navigation, are then forbidden for an extent of two hundred wersts down the river, all which space becomes gradually filled with an almost incredible number of fish. After a trial has been made in the first week of the month of December, the grand fisheries commence a few days before Christmas ; all the Cossacks colonised upon the banks of the river, excepting such as are doing duty at the advanced posts of the frontiers, may take part in them. The reserved space of two hundred wersts is then divided into several sections, and the fishery at

each must be terminated in one day, and in presence of the local authorities. As may be imagined, it is quite a festival for the Cossacks, who assemble in crowds at the rendezvous, armed with shovels, hooks, bars, and other implements. At length the ataman, placed upon the ice in the middle of the river, gives the signal so impatiently awaited for ; the firing of cannon transmits it to a distance, and immediately from seven to ten thousand men rush upon the surface of the river, make openings in the ice, plunge in their weapons, which they handle with wonderful dexterity, and announce their success with loud cries of joy and delight. An immense number of sturgeons being thus taken in a single day, they proceed immediately to prepare the caviar, which the Cossack merchants hasten to send with the utmost expedition to the two capitals of the empire.

The annual proceeds of the Oural fisheries amount to 3,000,000 roubles : although very important, they are not now, as formerly, the only resource of the Cossacks inhabiting the borders of this river ; the breeding of cattle, with which they have for some time occupied themselves, is very productive. In that part of their territory also which is situated above Ouralsk, where the land, less impregnated with salt, is more fertile, some commencements in agriculture have

lately been remarked,—a change the more valuable, as the increase of the population is there extremely rapid.

THE END.

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